

## 9910X DIAPHRAGM TYPE FLOAT VALVE

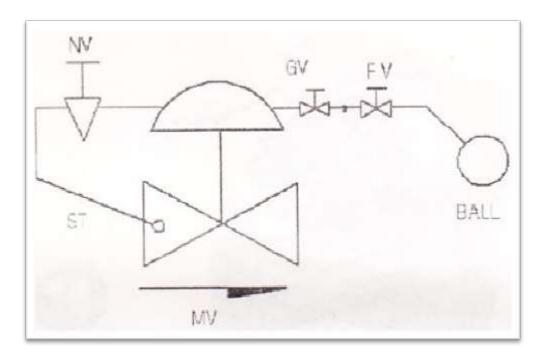


#### **OVERVIEW:**

Diaphragm type control float valve is a hydraulically-operated valve with much function. It is installed at the inlet of spool or water tower. When the water level reach to the setting, the main controlled by the pilot valve, close and stop supply water; when the water level falls downward, the main valve controlled by the pilot valve, opens and supplies water to the spool. The water level is controlled precisely and is not interfered by the water pressure. Floating ball control valve can be installed freely according to the spool's height and use spaces and easy to maintain, testing, inspect, reliable seal and long life. When is installed please link the outlet of water below the pool, which can avoid the surface of water level fluctuations affect the valve's closing functions.

## **Operation and maintenance manual**

Remote control floating valve (9910X) mainly composed of main valve, floating ball valve and filter etc. The lowest operating difference pressure, diaphragm type 0.2kg/cm³, the operating temperature is below 70°C, showing map as following:



## **Symbol explanation**

BALL: floating ball MV: main valve

NV: needle valve; GV: ball valve;

ST: strainer filter

Remote control floating ball valve is a hydraulically-operated valve with much function; main valve is installed at the inlet of pipeline of spool or water tower, when the spool reach to high water level, main valve closed by control float ball, control floating ball valve can be installed according to the height of spool and distance.

#### Installation instruction

#### Body of valve

#### A. main valve installation

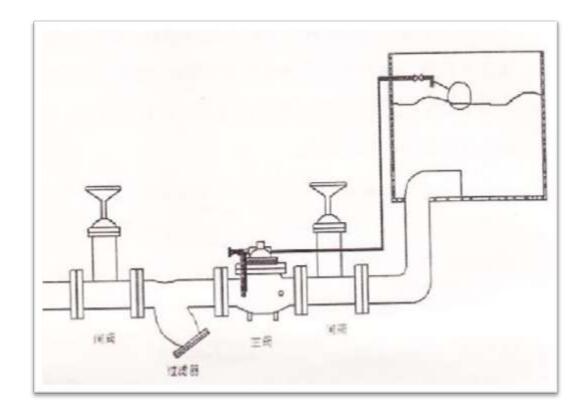
- 1. Please check carefully when installation the main valve, avoiding the sundries such as stones, branch in it.
- 2. Please keep the pipeline on the main valves tight, no looseness
- 3. Please clean the pipeline before install the main valve.
- 4. Install the main valve between the two gate valve or butterfly valve, which is convenience for maintain in the future.
- 5. Please install the filter before the valve, and make sure the pipelines clean.
- 6. Please keep the enough room for maintain and repair valves for engineers.
- 7. Please install the valve according to water flow direction
- 8. The best installation way is put the valve on the Horizontal pipe line, make the Bonnet upward.
- 9. Please using the screw and gasket, make sure the installation tightly
- 10. When testing, please open the gate valve slowly, add the pressure slowly, at the same time, please check the pipeline whether existing leaking water, lock the control pipeline.
- 11. When anything is ok, can operate the valve.
- 12. Keep the valve in the warm place, avoiding the valve frost crack, and environment temperature should higher than  $0^{\circ}$ C.

#### B. Remote control floating valve installation

The valve does not recommend adopt the whole installation way that means control floating ball valve install on the main valve.

#### The order of installation:

1. Install the main valve in the main pipeline, which as the follows:



(Translation: gate valve: strainer: main valve)

- 2. Using the air input interface Screw, which the type number is ZG1/2 or ZG1of Hexagon pipe coupling or copper pipe, connect the floating ball valve's installation place, the installation place should far away the inlet of water spool, avoiding the water impacting, the inlet of water can be in the base of spool or upside of spool.
- 3. The floating ball valve much fix on the wall of spool, tight the screw, install the ram, and floating ball, no leaking in the connection.
- 4. Please open the needle valve when operating.

#### Maintain instruction

- 1. The main valve need not any maintain.
- 2. Inspection problems
- 3. Overhaul the main valve
- 4. Am brand waterpower control valve, is of self-lubricating by water, no need any oil to lubricate, if some parts of main valve break, please according to the following process to dismantle, or our engineer will repair for, we can reach the work filed in the seven day when we get the notification

from our customers in China. The articles of consumption in main valve are O-rings and diaphragm.

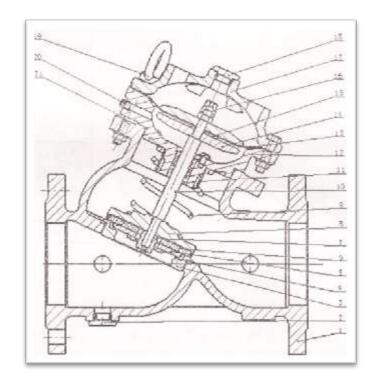
Problems	Inspection	Reason	Resolve	
main valve cannot close	close the ball valve GV, after some minutes if the main valve leaking, which show the main valve break, if not leaking, the control floating ball valve damage on some	control floating valve is leaking, or damage	replace control floating ball valve	
	parts, or upside damage	main valve damage	maintain the main valve	
	check the ball valve whether open	ball valve no open	open ball valve	
main valve cannot open	check the pressure of inlet is lower	. 9		
		the main valve damage	maintain the main valve	

#### The order of overhaul as following:

- 1. Closing valves which before and behind on the main valve.
- 2. Giving off the pressure from the main valve.
- 3. Taking off all the screws, including the copper valves and nuts.
- 4. Taking off the cover of valves and springs.
- 5. Taking off the axis, films and pistons, avoiding damage the films and leather cuff.
- 6. Please check the films, O-rings, if everything is no damage, please put at hand for installation.
- 7. Taking off the nuts of axis, take out of the films and O-rings, instead by new films and O-rings.
- 8. Please check carefully the inside of main valve, seat of valve and axis, make sure everything is ok.

- 9. Assemble all the parts, and main valve, please note keep the valve unimpeded.
- 10. Please reference the installation instruction and use again.

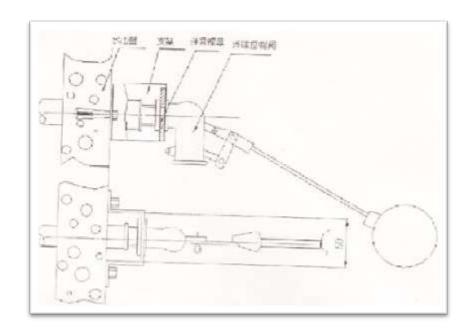
## The body of main valve and parts showing the follows:



No	Parts name	Material
1	Body	ductile cast iron
2	plug	brass
3	seat of valve	brass
4	disc plate	brass
5	disc	chemigum
6	long nut	brass
7	disc seat	brass
8	spring	stainless steel
9	steam	stainless steel
10	guide bush	brass
11	Diaphragm seat	ductile cast iron
12	Diaphragm	nylon chemigum

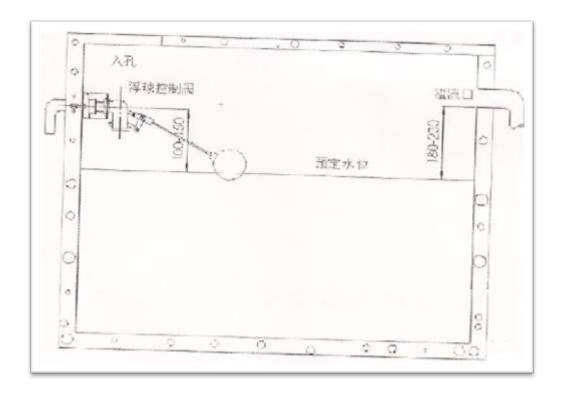
13	Diaphragm plate	brass
14	Diaphragm base plate	brass
15	setting nut	brass
16	bonnet	ductile cast iron
17	bonnet plug	brass
18	lifting eye nuts	stainless steel
19	Diaphragm plate plug	brass
20	double end stud	stainless steel

## Control floating ball valve installation skeleton map



1/2" control floating valve installation show

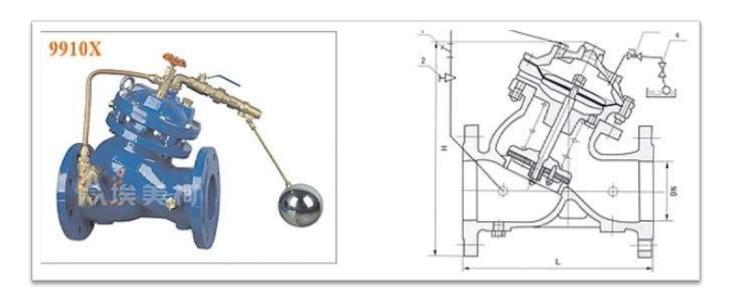
(Translation: the wall of spool: nog: nuts: floating control valve)



## 1" control floating valve installation show

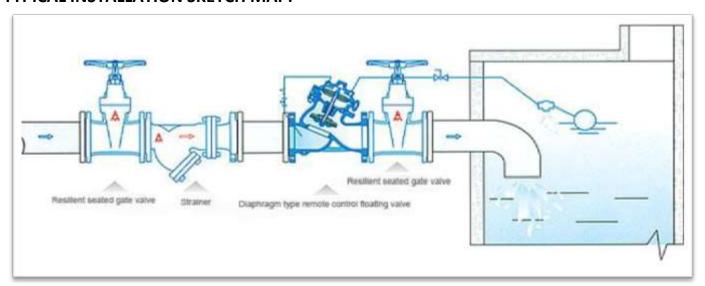
(Translation: inlet: overflow: water level: floating control valve)

In the actual operating, the highest water level may be higher than predetermined water level, may be lower than predetermined water level, which is normal phenomenon.



1. Strainer 2. Needle valve 3. Small ball valve 4. Small floating ball valve

#### **TYPICAL INSTALLATION SKETCH MAP:**



## **OUTLINE DIMENSION:**

(UNIT): mm

DN	50	65	80	100	125	150	200	250	300	350
L	205	216	250	320	365	415	500	605	725	733

# 9920X DIAPHRAGM TYPE ADJUSTABLE PRESSURE REDUCING VALVE

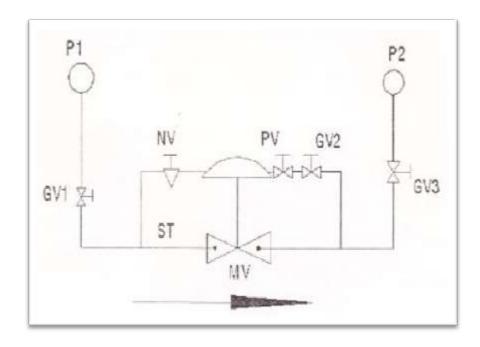


#### **OVERVIEW:**

Diaphragm type adjusting pressure reducing valve is installed in feeding/ draining water system in high building to reduce the inlet pressure to required pressure. The valve ensure outlet pressure stay in the setting value stably on its own energy, namely the outlet pressure does not change owing to the inlet pressure and flow change. There is a self-cleaning filtering mesh installed at the valve control system's inlet to prevent the great specific gravity and large diameter particle flow in to the system and ensure the system is unimpeded. The valve acts quickly and has a long life.

Decompression rage: outlet pressure 0.05-1.2MPa.

## **Operation and Maintenance Manual**



## **Symbol explanation:**

MV: main valve PV: pressure priority valves;

NV: needle valve; GV: ball valve;

ST: strainer filter P: pressure gauge

Note: pressure gauge will be installed unless have special requirements

## **Function explanation**

- 1. Reducing pressure valves (9920X) is diaphragm type, operated by waterpower, installed in water supply system, the outside of control valve pressure is set value.
- 2. Reducing pressure valves (9920X) adjust the inlet pressure by pressure priority valves, low down the outside pressure, and keep the outside pressure stable.
- 3. Needle valve must be open by anti-clockwise direction, or the needle valve will do not work, GV2 ball valve should be open, and keep the guild valve in right installation.

- 4.the pressure priority valve will auto-ranging the outlet pressure in the normal operating, rotating top of the screw by wrench, looking from up to down, rotates clockwise to increase outlet pressure, counterclockwise rotation, the outlet pressure reduce, adjust the pressure according to the required pressure value
- 5. Temperature range: 0-70°C
- 6. The pressure range: dynamic pressure: 0 to 16kg/cm<sup>2</sup>

Hydrostatic pressure: 0.1 to 15kg/cm²

#### Installation instruction

### **Body of valve**

- A. main valve installation
- 1. Please check carefully when installation the main valve, avoiding the sundries such as stones, branch in it.
- 2. Please keep the pipeline on the main valves and needle valve screw tight, no looseness
- 3. Please clean the pipeline before install the main valve.
- 4. Install the main valve between the two gate valve), which is convenience for maintain in the future.
- 5. Please keep the enough room for maintain and repair valves for engineers.
- 6. Please install the valve according to water flow direction
- 7. The best installation way is put the valve on the Horizontal pipe line, make the Bonnet upward.
- 8. Please using the screw and gasket, make sure the installation tightly
- 9. Please install the filter before the valve, and make sure the pipeline cleans.
- 10. When anything is ok, can operate the valve.
- 11. The main valve should not in the very cold place, which easy to frost crack, on this case, should adopt thermal insulation way.

(Working temperature under operating: 0-70°C)

#### **Maintain instruction**

- 5. The main valve need not any maintain, but the Syringe filter of pipeline need often clean, which need clean for 2 or 3 month one time.
- 6. inspection problem
  - A. no pressure reduce
  - 1) Closing the GV2, drop water from outlet, waits some minutes, if the pressure show zero that means the guild valve break, so you should repair for the guild valve
  - 2) If the pressure do not show zero, check whether existing short circuit on bypass line, please close the bypass line.
  - 3) If no short circuit, which show the main valve break, you should repair for main valve.
  - B. pressure reduce quickly when have big flowMain valve may be blocked, please maintain the main valve
  - C. vibration
    Air may be in the pipeline, please install the exhaust valve and turn down the Needle valve
  - D. big noises
    The difference of pressure may be big, please add the pressure reducing valve's quantity for reducing pressure.

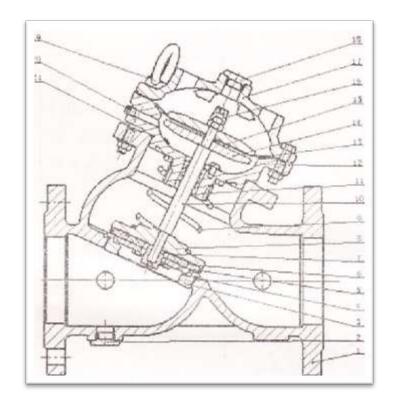
#### 3, overhaul the main valve

Am brand waterpower control valve, is of self-lubricating by water, no need any oil to lubricate, if some parts of main valve break, please according to the following process to dismantle, or our engineer will repair for, we can reach the work filed in the seven day when we get the notification from our customers in China, the article of consumption in main valve are O-rings and films

The order of overhaul as following:

- 11. Closing two gate vales which before and behind on the main valve.
- 12. Giving off the pressure from the main valve.
- 13. Taking off all the screws, including the copper valves and nuts.
- 14. Taking off the cover of valves and springs.
- 15. Taking off the axis, films and pistons, avoiding damage the films and leather cuff.
- 16. Please check the films, O-rings, if everything is no damage, please put at hand for installation.
- 17. Taking off the nuts of axis, take out of the films and O-rings, instead by new films and O-rings.
- 18. Please check carefully the inside of main valve, seat of valve and axis, make sure everything is ok.

- 19. Assemble all the parts, and main valve, please note keep the valve unimpeded.
- 20. Please reference the installation instruction and use again.



No	parts name	material
1	Body	ductile cast iron
2	plug	brass
3	seat of valve	brass
4	disc plate	brass
5	disc	chemigum
6	long nut	brass
7	disc seat	brass
8	spring	stainless steel
9	steam	stainless steel
10	guide bush	brass
11	Diaphragm seat	ductile cast iron

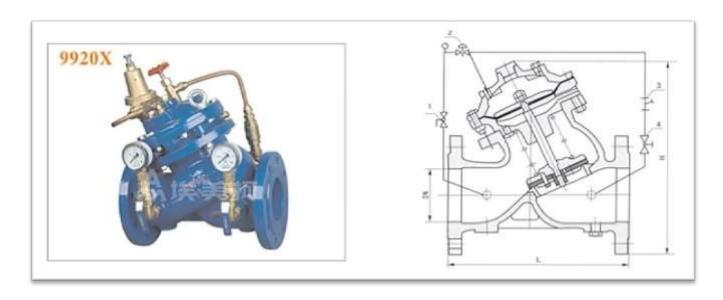
12	Diaphragm	nylon chemigum
13	Diaphragm plate	brass
14	Diaphragm base plate	brass
15	setting nut	brass
16	bonnet	ductile cast iron
17	bonnet plug	brass
18	lifting eye nuts	stainless steel
19	Diaphragm plate plug	brass
20	double end stud	stainless steel

#### Overhaul of guiding valve:

Overhaul according to the following process (need not take off the pressure reducing valves from pipeline):

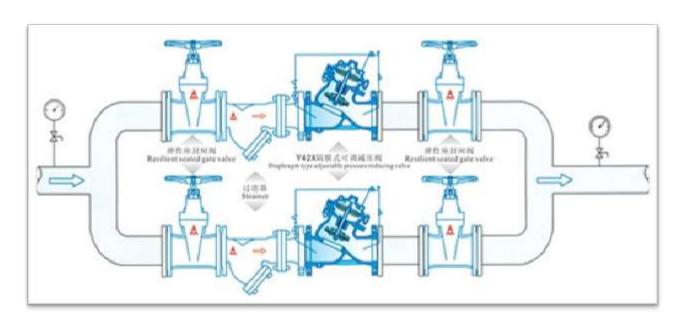
Note: Please take down all the pressure which lead to reducing pressure valve, and release the pressure between reducing pressure valve and gate valve.

- 1. Screw off the regulation spring, take off the bonnet screw and bonnet.
- 2. Taking off the seat of valve, and remove the diaphragm setting screw, plate and diaphragm
- 3. Taking off valve disk parts.
- 4. Checking the parts whether damage, and displace the parts.
- 5. Taking off the syringe filter cap, and checking it, please cleans the syringe filter periodic



1. Small ball valve 2. Pilot valve 3. Needle valve 4. Strainer

#### **TYPICAL INSTALLATION SKETCH MAP:**



#### **OUTLINE DIMENSION:**

(UNIT): mm

DN	50	65	80	100	125	150	200	250	300	350
L	205	216	250	320	365	415	500	605	725	733

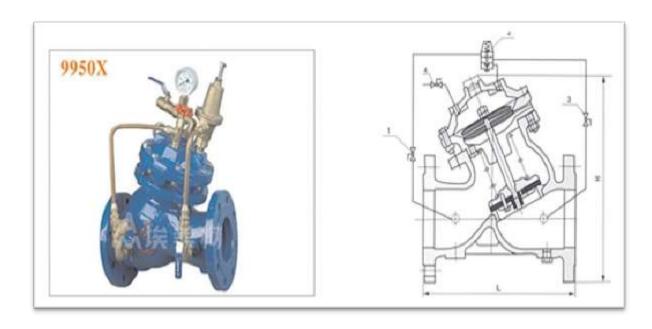
# 9950X DIAPHRAGM TYPE RELEASE/ MAINTAINING VALVE (SURGE ANTICIPATING VALVE)



#### **OVERVIEW:**

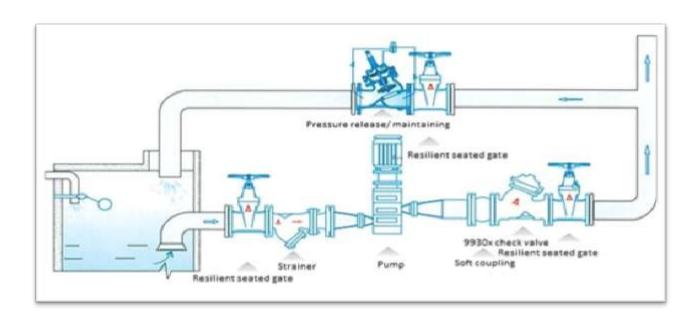
Pressure release/ holding valve is installed in the pipeline of high building, fire-fighting shared water supply system and other water supply systems, release the pressure in pipeline which is in excess of the safe preset value of pilot valve, protecting the pipeline; meanwhile as pressure holding valve, when the pressure of pipeline below the certain safe valve, the main valve keep on closing, maintain the water supply pressure at the upper stream of main valve over a certain preset value, once when is overpressure, the pressure release valve will open quickly, and relief. The valve ca be closed in safety, and eliminate the rarefaction wave of pressure.

Pressure operating range: 0.1-1.6MPa.



1. Small ball valve 2. Pilot valve 3. Needle valve 4. Ball valve

#### **TYPICAL INSTALLATION SKETCH MAP:**



#### **OUTLINE DIMENSION:**

(UNIT): mm

DN	50	65	80	100	125	150	200	250	300	350
L	205	216	250	320	365	415	500	605	725	733

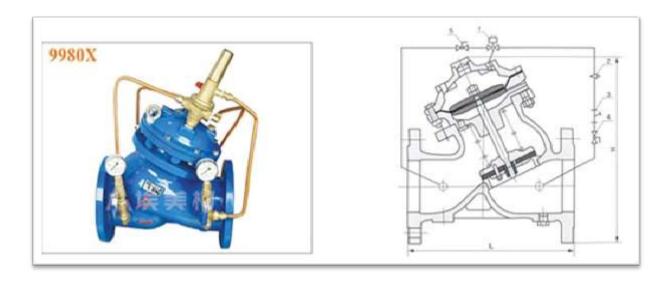
# 9980X DIAPHRAGM TYPE PRESSURE DIFFERENCE BYPASS BALANCE VALVE



#### **OVERVIEW:**

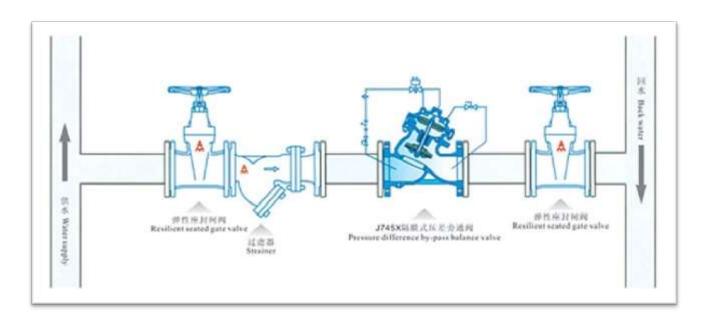
Pressure difference by-pass balance valve is a kind of valve which installed on the pipeline between the water supply part and the return water part, which control the main valve's closing and opening by pressure difference between the outlet pressure and inlet pressure, the shut-off speed of the valve is adjustable and smooth shutoff can be realized without causing any pressure variation. When the pressure difference exceeds the set value, the main valve will open and add water flow for the return pipeline. When the pressure difference less than the set value, the main valve keeps closing.

Pressure operating range: 0.05-1.0MPa.



1. Pressure difference pilot valve 2. Needle valve 3. Strainer 4. Small ball valve 5. Small ball valve

#### **TYPICAL INSTALLATION SKETCH MAP:**



#### **OUTLINE DIMENSION:**

(UNIT): mm

DN	50	65	80	100	125	150	200	250	300	350
L	205	216	250	320	365	415	500	605	725	733

# 9930X SLOW-CLOSURE TYPE CHECK VALVE (NON-SLAM CHECK VALVE)



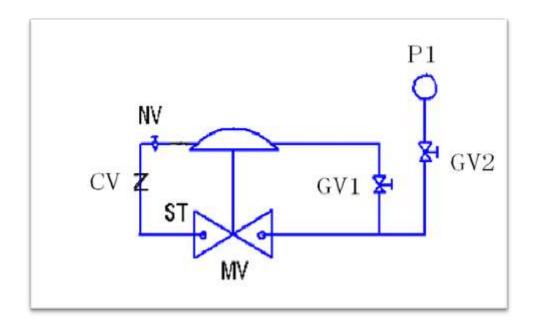
#### **OVERVIEW:**

Slow control check valve is installed in water supply system or other water system of pump outlet in high building, is an intelligent valve to prevent backflow medium, water hammer and water slamming phenomenon. The valve us medium pressure of its own, control and turn off with a delay function to eliminate or alleviate the water hammer. It combines an ordinary check valve and water hammer eliminator function together, which can effectively improve the security and reliability of water supply systems.

## **Operation and Maintenance Manual**

Slow shut check valve (9930X) is mainly composed of main valve, check valve, needle valve, ball valve, and strainer filter etc.

The valve's diagram of the piping design is as follows:



### **Symbol explanation**

MV: main valve CV: check valve

NV: needle valve GV: ball valve

ST: strainer filter P: pressure gauge

 ${\rm I\hspace{-.1em}I}$  . Function explanation

1. Slow shut check valve (9930X) is a diaphragm-type and operated by water; main valve is installed in the water pipeline, avoiding backflow damage the equipment, such as pump; it shuts slowly, so water hammer will almost not be caused.

- 2. The NV and the GV1 must be opened, or the valve will not work.
- 3. If the CV is damaged, you can close the NV to make the valve work normally.
- 4. Working temperature: 0-70°C
- 5. Pressure range: 0.2 ~1.6Mpa (or 0.2~2.5Mpa)
- 6. 200-250 PSI

#### Installation instruction

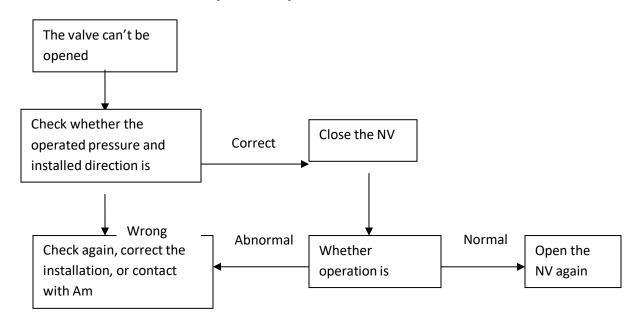
#### **Body**

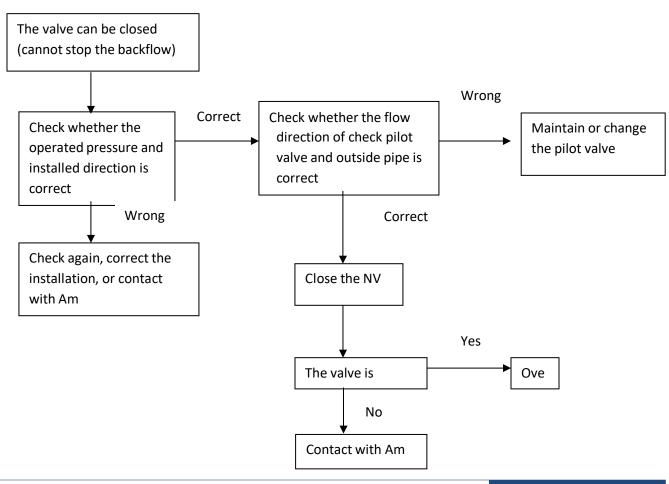
- A. main valve installation
- 1. Please check carefully when install the main valve, avoiding the sundries such as stones, branch in it.
- 2. Please keep the pipeline on the main valves and needle valve screw tight, no looseness
- 3. Please clean the pipeline before install the main valve.
- 4. Please install the main valve between the two gate valve, which is convenience for maintain in the future.
- 5. Please keep the enough room for maintain and repair valves for engineers.
- 6. Please install the valve according to water flow direction
- 7. The best installation way is put the valve on the Horizontal pipe line, make the Bonnet upward. But please pay attention to put the bonnet of check pilot valve upward, or it will not work.
- 8. Please using the screw and gasket, make sure the installation tight.
- 9. When do the water leak detection, please open the gate valve which is before the main valve, increase the pressure slowly, check whether the pipeline which on the main valves is leaking, and if it is, please lock it.
- 10. In normal use, please confirm that the BV is opened.
- B. Debugging
- 1. According to the customers 'actual installation, make the valve work.
- 2. If it shakes violently and makes too much noise, please turn down the GV1, while adjusting the NV to the suitable dimension.

- 3. Repeat step 2 until satisfied.
- 4. Please strike the handle of the GV1, avoiding anyone touches the handle.
- 5. Check whether the installation is correct and whether the BV is completely opened.

After complete these steps, you can use the valve freely.

## **Inspection problems**





### **Maintain Instruction**

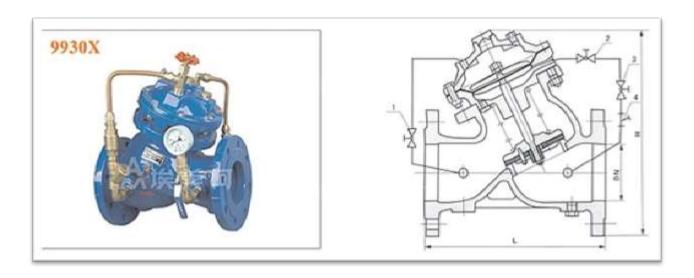
#### Overhaul the main valve

Am brand waterpower control valve, is of self-lubricating by water, no need any oil to lubricate, if some parts of main valve break, please according to the following process to dismantle, or our engineer will repair for, we can reach the work filed in the seven day when we get the notification from our customers in China. The articles of consumption in main valve are O-rings and diaphragm.

The order of overhaul is as follows:

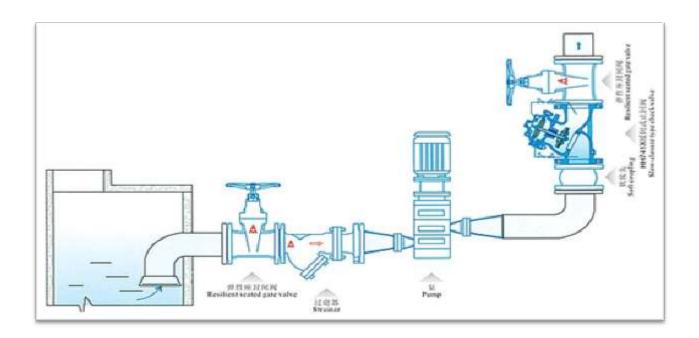
- 1. Closing valves which before and behind on the main valve.
- 2. Giving off the pressure from the main valve.
- 3. Loosen the nuts and copper pipe which are in the control pipeline.
- 4. Loosen the bolts which connect with the valve, taking down all the parts which are above the body.
- 5. Please check there is nothing in the main valve and check, the seat, spindle and spring are no damage.
- 6. Please reference the installation instruction and use again.
- 7. If the valve still can't work normally, please take down the parts which are above the body again, and open the entire bolt which are on the bonnet, then taking down the diaphragm to check whether it is damaged.
- 8. Taking down the spindle, spring and valve clack flat; check whether the valve clack rubber is damaged. If it is, please change it.

- 9. Assemble all the parts, and main valve.
- 10. Please reference the installation instruction and use again



1. Small ball valve 2. Needle valve 3. Check valve 4. Strainer

#### **TYPICAL INSTALLATION SKETCH MAP:**



#### **OUTLINE DIMENSION:**

(UNIT): mm

DN	50	65	80	100	125	150	200	250	300	350
L	205	216	250	320	365	415	500	605	725	733

# 9408/9418 SILENCE CHECK VALVE



#### **OVERVIEW:**

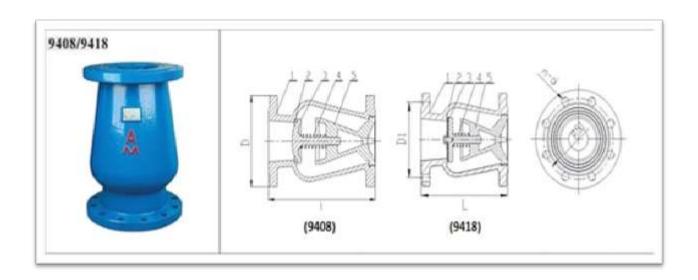
Silence check valve consists of valve body, seat, diversion shuttle, disc, and spring etc. The inside is streamline designed so water head loss is very little. Meanwhile the disc's shutoff stroke is very short and when the pump is closed, the valve can close quickly, prevent the big noise and water-hammering so the valve can close quietly without any noise. It is widely used in water supply and drainage system, fire protection and heat supplying system, and it is installed at the outlet of the pump to prevent damages of backward fluid and water-hammering to the pump.

#### PERFORMANCE PARAMETER

Nominal pressure: 1.0MPa, 1.6MPa, 2.5MPa

Working medium: clean water
Working temperature: 0-70/120°C
Flanged end: GB/T17241.6-98 standard

200 - 250 PSI



#### **MATERIAL**

NUMBER	1	2	3	4	5
PART NAME	BODY	SEAT	DISC	SPRING	DIVERSION SHUTTLE
MATERIAL	CAST IRON (PN10/16)/ DUCTILE CAST IRON (PN25)	BRASS	BRASS/CHEMIGUM	STAINLESS STEEL	CAST IRON

#### **OUTLINE DIMENSION**

(Model): H41T (X)-10/16 H41T-25Q (UNIT): mm

DN	NO.	L		D			D1			d		,	N	
			PN10	PN16	PN25									
50	DRVZ-0050	120	165	165	165	125	125	125	18	18	18	4	4	4
65	DRVZ-0065	150	185	185	185	145	145	145	18	18	18	4	4	8
80	DRVZ-0080	180	200	200	200	160	160	160	18	18	18	8	8	8
100	DRVZ-0100	240	220	220	235	180	180	190	18	18	22	8	8	8
125	DRVZ-0125	300	250	250	270	210	210	220	18	18	26	8	8	8
150	DRVZ-0150	350	285	285	300	240	240	250	22	22	26	8	8	8
200	DRVZ-0200	450	340	340	360	295	295	310	22	22	26	8	12	12
250	DRVZ-0250	500	395	395	405	350	355	370	22	26	30	12	12	12
300	DRVZ-0300	550	445	460	485	400	410	430	23	28	31	12	12	16

# 9405 RUBBER DISC CHECK VALVE (SWING TYPE)



#### **OVERVIEW:**

Rubber disc check valve consists of body, cover and rubber disc. The rubber disc consists of ductile cast iron disc framework, reinforced nylon mesh, and rubber covered outside, so the disc has a long life of open-close. The valve adopts full flow area design, so the pressure loss is very little and no sundries pilling up in the body and it is easy to maintain this kind of valve. The valve is used for water supply and drainage system and is installed on the outlet of the pump to prevent the fluid flowing backward and water hammer. Also it can be installed at the inlet/outlet's bypass pipe to prevent the water in the cistern flowing backward into the pipe.

#### PERFORMANCE PARAMETER

**MATERIAL** 

Nominal pressure: 1.0MPa, 1.6MPa

Valve body: Grey cast iron

Working medium: water

Valve cover: Grey cast iron

Working temperature: 0-70°C Valve disc: Ductile cast iron + NBR

Flanged end: GB/T17241.6-98 standard 200 – 250PSI

The valve is used for water supply and drainage system and installed on the outlet of the pump to prevent fluid flowing backward and water hammer; it also can be installed at the inlet/outlet's bypass pipe to prevent the water in the cistern flowing backward into the pipe.

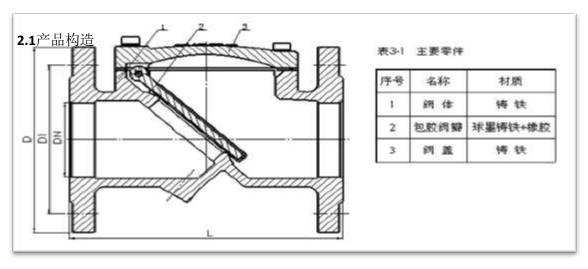
#### 1.2 Principle

The valve is used for water supply system and installed on the outlet of the pump to prevent fluid flowing backward when the pump stops working; it also can be installed at the inlet/outlet's bypass pipe to prevent the water in the cistern flowing backward into the pipe.

#### 1.3 Main Features

- 1) Rubber disc check valve consists of body, cover and rubber disc. the rubber disc is consist of ductile cast iron disc steel framework, reinforced nylon mesh, and the outside covers with rubber, with high tenacity and better long life on open-close, which can reach to 1 million times.
- 2) The valve is used for sewage system, designed with unimpeded bore; no sundries pile up in the body, shorter on close process and low down the water hammer.

#### 2. Parameter



No 1: valve Body: Grew cast iron

No 2: valve disc ductile cast iron+ NBR

No3: valve cover: grey cast iron

#### 2.2 Technical parameter

Technical parameter	Parameter
Normal diameter mm)	DN50~DN300
Normal pressure (Mpa)	PN1.0、1.6
Working temperature (°C)	0~70°C
Working medium	water、sewage、raw water
Body testing pressure (Mpa)	1.5×PN
Seal testing pressure (Mpa)	1.1×PN

#### Installation instruction

#### 3.1 Valve installation

- 1. Please check carefully when installation the main valve, avoiding the sundries such as stones, branch in it.
- 2. Please keep the pipeline on the main valves and needle valve screw tight, no looseness
- 3. Please install the valve according to water flow direction
- 4. Please keep more screws and gaskets for connecting pipe fittings in order make everything fixing firmly.
- 5. Please install the valve in the straight line avoiding getting two reverse applied force
- 6. It should be add holder under the valves when the hang pipe line is longer
- 7. It should not install the new check valves between front and behind.
- 8. Making sure the screw is tight, avoiding water leaking.

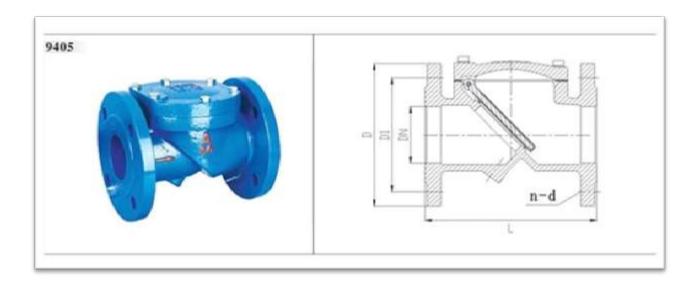
#### 3.2 Operation

- 1. The valves can use for a long time and keep better working condition after equilibrium design
- 2. Please keep the warm for valves when the working temperature below zero, if you do not use the valve for a long time, please dropt water out.

#### 3.3 Maintenance

When something with the valves in the working condition, such as check valve can stop or loose seal, remove the body cover, and check valve disc.

- 1. Check whether exist something blocks.
- 2. The valve's disc seal line whether have surface scratch, the wrap whether fall off, please change the new one if you need.
- 3. Please repair for or change the valve body, if the valve body and valve seat exist surface scratch and corrosion
- 4. We can supply the valves parts for valves if you need change parts



#### **OUTLINE DIMENSION**

(Model): H44X-10/16 (UNIT): mm

DN	No.	L	D	D1	d	N
50	SFCV-0050	203	165	125	19	4
65	SFCV-0065	216	185	145	19	4
80	SFCV-0080	241	200	160	19	8
100	SFCV-0100	292	220	180	19	8
125	SFCV-0125	330	250	210	19	8
150	SFCV-0150	356	285	240	23	8
200	SFCV-0200	495	340	295	23	8/12
250	SFCV-0250	622	395/405	350/355	23/26	12
300	SFCV-0300	698	455/460	400/410	23/26	12

## 9406 DOUBLE DISC CHECK VALVE (WAFER TYPE)



#### **OVERVIEW:**

Double disc check valve consists of body, disc, valve rod and spring and other parts. The valve is designed with slim light weight, the disc's shutoff stroke is very short and under the effect of the spring, the valve can close quickly and prevent the big noise from water-hammering. It is widely used in water supply and drainage system, high-rise building and industrial park. Because of its surface distance is short than other check valves. So it is more convenient for the confined space installation.

#### PERFORMANCE PARAMETER

Nominal pressure: 1.6MPa Working medium: Clean water Working temperature: 0-70°C

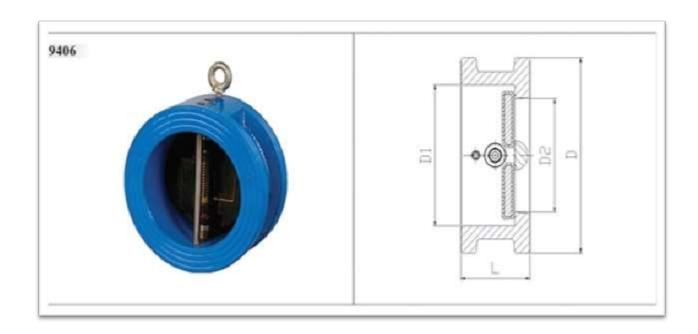
200 - 250PSI

#### **MATERIAL**

Valve body: Cast iron

Valve disc: ductile cast iron + NBR

Valve rod: stainless steel Spring: Stainless steel



#### **OUTLINE DIMENSION**

(Model): H76X-16 (UNIT): mm

111100001/11111011				(01111)1111111
DN	L	D1	D2	D
50	43	69	46	105
65	46	81	58	124
80	64	97	74	142
100	64	117	94	162
125	70	141	112	192
150	76	168	138	218
200	89	217	188	273
250	114	273	222	328
300	114	324	270	378

## 9151 NON-RISING STEM GATE VALVE



#### **PERFORMANCE PARAMETER**

Nominal pressure: 1.0MPa, 1.6MPa Working medium: Clean water Working temperature: 0-70°C

#### 1.1.1 Overview

The traditional gate valves have the problem on leakage and rusting in the market for a long time, our company introduce the high technology of rubber-packed and valves production from Europe to manufacture valves, which overcome the poor sealing, lacking of flexibility, rubber aging and rusting etc.

#### 1.1.2 Principle

Gate valve is one kind of valve which drives by valve spool, along the seal side of valve seat for lifting movement, in order to stop fluid in the valve. Mainly through hand-wheel, driving cap, electric or pneumatic operation device, drive stem long the rotary movement (Non-rising stem type) or linear reciprocating motion (rising stem type) to operate the valve.

The resilient seated gate valve makes use of elastic valves, which produce flexible micro-valves of compensation to achieve good sealing, valves can be open and close deftly, reliable sealing, excellent elasticity and long life, It is widely used in tap water industry, sewage treatment, shipping, construction, petroleum, chemicals, food, pharmacy, textile, electric power, metallurgy and energy systems pipeline to adjust and shut off fluid.

#### 1.1.3 Features

The resilient seated gate valve makes use of elastic valves, which produce flexible micro-valves of compensation to achieve good sealing, the main features as following:

1). The resilient seated gate valve makes use of elastic valves, which produce flexible micro-valves of compensation to achieve good sealing

- 2). Embedded copper nut, hardly exist loose and damage.
- 3). The bottom of valve is plain, not easy to block up by debris.

- 4). The three O-ring reduce water leakage and replace the O-ring under the pressure and keeping water supply.
- 5). The body of valves is printed by powdered epoxy, can be prevent the corrosion and rusting, improve supply water quality.

#### 1. 2 Installation, operation and maintenance

#### 1.2.1 Prepares before installation

- 1. Profit bumping and falling off when transporting and installing, avoiding damage the surface of protects layer and parts.
- 2. Please do not put the valves under the sun or outside room in the long time without covering, because the main seal parts made by rubber.
- 3. Please leave more enough room for worker install, when the valve put in the well.
- 4. Please avoiding the weight on valves comes from the pipe and others, which should design the fixing for valves
- 5. It should be weld the pipe flange and pipe advance when install the valve to pipe. Please do not weld the pipe flange and pipe together with valves, which will be damage the seal of valve.
- 6. When welding the pipe flange and pipe, should not bring the excess distortion, weld angle which can affect the surface of seal.
- 7. Please keep the pipeline on the main valves and needle valve screw tight, no looseness
- 8. Please make ready for the hoisting fixings, wrench and seal gasket, bolt, screws and rings etc, all the screws and bolts should fit for pipe.

#### 1.2.2 Installation

- 1. We have made the strict performance testing for valve before leave off factory, electric or pneumatic operating devices have been adjusted for the best state. Make sure before installation that the surrounding environment, pipe flanges, pipe work pressure, the subsidiary lines, equipment is conform to the valve's using conditions.
- 2. The connection way between valve and pipe through by flange, welding, clamp and other connection method, please kindly inform us when you place order.
- 3. Please install the valve in the straight line avoiding getting two reverse applied force
- 4. The distance of flange should fit for valve, please do not screw down bolts, which can damage valve or pipe flange.
- 5. Please screw down bolts on the pipe flange, which will not cause water leaking.
- 6. Amico brand gate valves can seal double, no direction install requires.
- 7. Please install valves by vertical type and horizontal type, please do not fix by handstand, which easy to cause so much waste in valve's body.
- 8. Please open the valve after installing, flush the pipe by big flow, which can get rid of sundries.
- 9. Electro motion device gate valve, the circuit connections way refer to the Electro motion device instruction.

10. Please check the valves and operation motion carefully after finishing installation.

#### 1.2.3 Valve operation

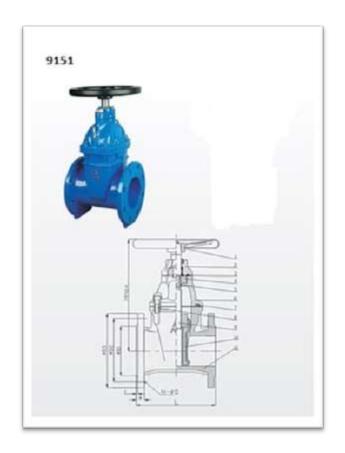
- 1. The valve operate by hand wheel or handle, clockwise operating show the valve close, counter clockwise show the valve open.
- 2. You may judge the opening condition of valve by opening circle.
- 3. Rising stem gate valve: the operation is the same as Non-rising stem gate valves.
- 4. Electro motion device gate valve, the circuit connection way refers to the electro motion device instruction.
- 5. If the valves need open after long close down, please do not use in big strength for opening, which will be damage seal and other valves frame parts.
- 6. The gate valve use for cut-off equipment on pipeline, which cannot adjust fluid pressure or flow.

#### 1.2.4 Maintenance

- 1. Lubrication: the valve can lubricate by working medium, such as water, need not daily lubricate, you may print some grease on valve spool when take down the valves or overhaul pipeline.
- 2. Keep warm: please keep the warm for valves when the working temperature below zero, if you do not use the valve for a long time, pleases dropt water out.
- 3. Please check and maintain valve regularly, avoiding extra pipe working pressure excess the valves.
- 4. Please do not tear down the valve cover, which bears working medium pressure.
- 5. Please check the bolts regularly, especially when pipeline vibrate under the working.
- 6. If the valves using frequently or under the bad working condition, please replace seal rings regularly. 7. When you replace the O-rings, please turn down the valves, release pressure of body, keep the leftover of valve no harm to people.
- 8. Regards to the rising stem gate valve, please adjust and lock nuts or fill bolt on cover, which can adjust Orings' seal.
- 9. valve seal
- (1) If the valve cannot close seal, which may be sundries block the seal cover, open the valve and flush sundries.
- (2) If the valve cannot close seal, which may be the flashboard rubber abrasion or damage, please tear down valve for checking, if need please replace rubber.
- 10. Non-rising stem gate valve shaft seal: adopt three O-rings sealing frame, replace seal ring as following:
- (1) Close down the front and behind on valve, release the pressure on valve; if have electro motion and air-operated device, please cut off power and air.
- (2) Take off the locknut or axes, replace two way O-seal rings.
- (3) Take off the valve spool; and replace two way O-seal rings.
- (4) Take off the locknut, make sure the compression ring lock on the valve cover, you may replace the two way O seal rings when water flow and valves' opening.

- A. Set down frame to replace seal rings please refers to the followings:
- Close down the front and behind on valve, release the pressure on valve; If have electro motion and air-operated device, please cut off power and air.
- 1). Set down the connection frame, handles etc. in order, and takes out of damaged O type seal rings
- 2). Replace the O type seal rings, make sure the opening direction of seal rings is the same as pressure direction, and print grease.
- 3). Put on the locknuts, compression rings, and readjusts O type seal rings.
- 4). Install the connection frame etc. in order, renew the pressure of pipe, and check whether water leaking.
- B. Replace O type seal rings on line, please refer to the followings:
- 1). Close down the front and behind on valve, release the pressure on valve; if have electro motion and air-operated device, please cut off power and air.
- 2). Put up locknut, compression rings; take out of damaged O type seal rings
- 3).Cut down the new O-ring or other forming seal rings by radial 45°, and cover to valve axis far from kerfs, or use braiding wrapped around valve stem.

- 4). Fit on and adjust O type seal rings
- 5). Renew the pressure of pipe, and check whether water leaking.



No.	PRODUCT NAME	MATERIAL
1	HANDWHEEL	A3
2	SHAFT CAP	DUCTILE CAST IRON
3	O-RING	NBR
4	BEARING	BRASS
5	O-RING	NBR
6	BONNET	DUCTILE CAST IRON
7	SEALING RING	NBR
8	BOLT	STAINLESS STEEL
9	STEM	STAINLESS STEEL
10	DISC	DUCTILE CAST IRON + EPDM (NBR)
11	BODY	DUCTILE CAST IRON

## **OUTLINE DIMENSION**

(Model): H76X-16 (UNIT): mm

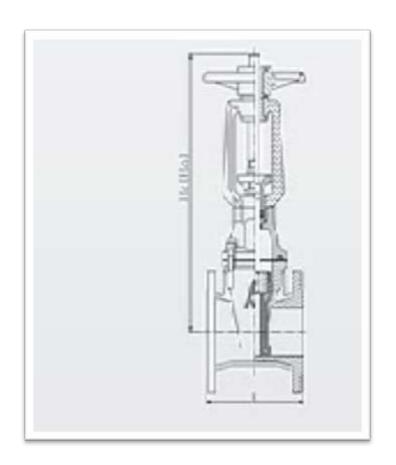
				D2		D3					N-c	þ d	BOL	Γ
No.	DN	L	D1	1.0MP a	1.6MP a	1.0MPa	1.6MP a	Hmax.	В	F	1.0MPa	1.6MPa	1.0MPa	1.6MPa
RVC (H) X-0050	50	178	99	12	!5	165	5	248	19	3		-19	M16	
RVC (H) X-0065	65	190	118	14	5	185	5	265	19	3	4	l-19	M1	.6
RVC (H) X-0080	80	203	132	16	0	200	)	306	19	3	8	3-19	M1	.6
RVC (H) X-0100	100	229	156	18	0	220	)	342	19	3	8	3-19	M1	.6
RVC (H) X-0125	125	254	184	21	210		)	388	19	3	8	8-19		.6
RVC (H) X-0150	150	267	211	24	0	285		456	19	3	8-23		M16	
RVC (H) X-0200	200	292	266	29	15	340	)	540	20	3	8-23	8-23	M2	20
RVC (H) X-0250	250	330	319	350	355	405	5	650	22	3	12-23	12-28	M20	M24
RVC (H) X-0300	300	356	370	400	410	460	)	770	24.5	4	12-23	12-28	M20	M24
RVC (H) X-0350	350	381	429	460	470	520	)	980	26.5	4	12-23	12-28	M20	M24
RVC (H) X-0400	400	406	480	515	525	580	)	1010	28	4	16-28	16-31	M24	M27
RVC (H) X-0450	450	432	530	565	585	640		1270	30	4	20-28	20-31	M24	M27
RVC (H) X-0500	500	457	585	620	650	715	5	1270	31.5	4	20-28	20-34	M24	M30
RVC (H) X-0600	600	508	685	725	770	810	840	1390	36	5	20-31	20-37	M27	M33

# 9152 RISING STEM GATE VALVE



#### **PERFORMANCE PARAMETER**

Nominal pressure: 1.0MPa, 1.6MPa Working medium: Clean water Working temperature: 0-70°C



## **OUTLINE DIMENSION**

(Model): H76X-16 (UNIT): mm

				D	2	D3			Нс	Но	N-	φd	BC	OLT
No.	DN	L	D1	1.0MPa	1.6MPa	1.0MPa	1.6MPa	Hmax.	Full close	Full open	1.0MP a	1.6MPa	1.0MPa	1.6MPa
RVSX (RRHX) 0050	50	178	99	12	25	16	55	323	323	390	4-	19	M16	
RVSX (RRHX) 0065	65	190	118	14	45	18	35	340	350	418	4-	19	M	116
RVSX(RRHX) 0080	80	203	132	16	50	20	00	376	400	491	8-	19	M	116
RVSX (RRHX) 0100	100	229	156	18	180 220 430 470 574 8-19		19	M16						
RVSX (RRHX) 0125	125	254	184	21	10	25	50	472	493	633	8-19		M16	
RVSX (RRHX) 0150	150	267	211	24	40	28	35	536	608	775	8-	-23	M	116
RVSX (RRHX) 0200	200	292	266	29	95	34	10	622	777	982	8-23	8-23	M	120
RVSX (RRHX) 0250	250	330	319	350	355	40	)5	733	882	1138	12-23	12-28	M20	M24
RVSX (RRHX) 0300	300	356	370	400	410	46	50	920	1009	1317	12-23	12-28	M20	M24
RVSX (RRHX) 0350	350	381	429	460	470	52	20	1080	1300	1655	12-23	12-28	M20	M24
RVSX (RRHX) 0400	400	406	480	515	525	58	30	1110	1380	1805	16-28	16-31	M24	M27

# 6699/6699A CAST IRON Y TYPE STRAINER



Y-type strainer is mainly used in high-rise building, multi-story and factory building water supply and air-conditioning piping system, generally installed in the inlet of pressure reducing valve, pressure release valve, remote control floating ball valve and other main equipment's, convenient for filter impurities to ensure the normal use of the valve and equipment. The valve users removable bolts and nuts to connect the bottom cover the body, both side and outside are covered the epoxy powder coating to prevent rusting and impact on water quality.

#### PERFORMANCE PARAMETER

Nominal Pressure: 1.0MPa, 1.6MPa Nominal Diameter: 50-300mm Working medium: Clean water Working temperature: 0-120°C

PART NAME	BODY	COVER	FILTER	GASKET RING	PLUG
MATERIAL	CAST IRON	CAST IRON	STAINLESS	GRAPHITE	CAST IRON
			STEEL	GASKET	

#### **OUTLINE DIMENSION**

(UNIT): mm

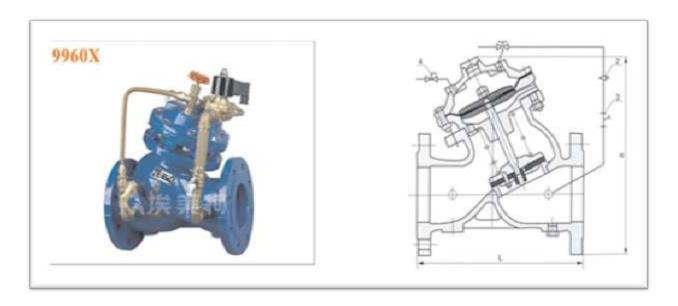
			[	01	[	02	N-φ d			
DN	L	Н	1.0MPa	1.6MPa	1.0MPa	1.6MPa	1.0MPa	1.6MPa		
50	250	250	1	65	125		4-	19		
65	285	280	1	85	145		4-19			
80	315	300	2	00	1	60	8-19			
100	370	365	2	20	1	80	8-19			
125	420	420	2	250 210		10	8-	19		
150	490	488	2	285		40	8-	23		
200	570	595	3	340		340		95	8-23	12-23
250	680	720	405		350	355	12-23	12-28		
300	800	830	4	460		410	12-23	12-28		

## 9960X ELECTRIC CONTROL VALVE



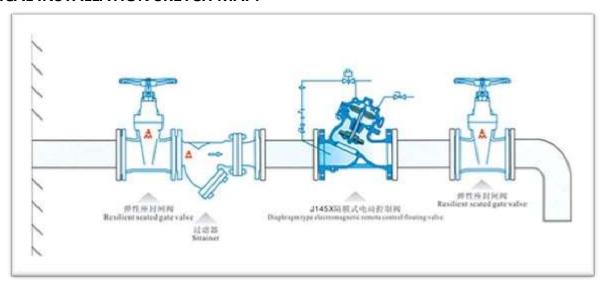
#### **OVERVIEW:**

Electric remote control valve is installed in all kinds of water supply system's pipeline and openor close the valve by manual or electric signal. The valve's control and reaction is precise and quick. The shut-off speed of the valve is adjustable and smooth shutoff can be realized without causing any pressure variation. 220VAC can be used for valve and you can choose to use the constantly open or constantly closed valve according to you actual needs during a specific situation.



1. Solenoid Pilot Valve 2. Needle Valve 3. Strainer 4. Small Floating Valve

#### **TYPICAL INSTALLATION SKETCH MAP:**



#### **OUTLINE DIMENSION:**

(UNIT): mm

DN	50	65	80	100	125	150	200	250	300	350
L	205	216	250	320	365	415	500	605	725	733