



The logo for PHOENIX, featuring the word 'PHOENIX' in a white, stylized, blocky font on a red rectangular background.

## PRODUCT TECHNICAL STATEMENT

Incorporating BPIR requirements as per  
Building Product Information Regulations 2022

### Hebei Phoenix cast iron ball valves and strainers

Supplied by Hydroflow

HYDROFLOW DISTRIBUTORS LTD  
221 Bush Road  
Rosedale, Albany, North Shore  
Auckland  
Tel: +64 9 415 6151

#### Hebei Phoenix in New Zealand

PHOENIX ENTERPRISES is a specialized manufacturer of pipeline and garden products, including all material fittings, flanges, valves, pipes/tubes, hardware & tools and garden products etc. With 20 years' experience of pipeline and garden products manufacturing and trading, PHOENIX has established a stable market network. With good quality and reasonable price, Phoenix has gained good reputation both home and abroad. We registered our own trademark of "PHP" and "Maxxport" and have registered companies in Japan and Australia, and we also set up offices in Germany, USA, Colombia, Ecuador and Singapore.

This PTS covers all of the products supplied by Hydroflow, on behalf of Hebei Phoenix, in New Zealand.

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Product Technical Specification & BPIR Hebei Phoenix stainless steel ball valves and fittings	v 1	11 December 2023

## Revision control

Revision number	Revision information	Date
v 1	New PTS (BPIR)	11 December 2023

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## Purpose and use

Hebei Phoenix stainless steel ball valves and fittings for use in plumbing are suitable for mains pressure.

## Product description

Hebei Phoenix stainless steel ball valves and fittings complies with the NZBC as shown below in the BPIR section.

A full product listing is available on the Hydroflow website, specifically for ball valves: [Hydroflow](#)

## Key advantages

Each Hebei Phoenix product specification, features and benefits are available on the website as shown on the [Hebei website](#).

## Technical Information, Installation Instructions, Maintenance Instructions

All Hebei Phoenix stainless steel ball valves and fittings technical information is available for download at the website:

### [Hebei Phoenix](#)

Information available as follows:

- Product description
- Material/product technical specifications
- Applicable compliance standards

### Cast Iron

#### Non-rising stem resilient soft seated gate valves BS5163

Non-rising BS1218 "A" type gate valves

Non-rising BS1218 "B" type gate valves

Non-rising BS5163 "O" type metal seated gate valves

#### Non-rising stem BS3464 gate valves

Non-rising stem gate valves ANSI125/150

#### Non-rising stem gate valves BS5163

Non-rising Stem gate Valves DIN3352-F4 "A" type

Non-rising Stem gate Valves DIN3352-F4 "B" type

Non-rising stem gate Valves DIN3352-F4 "O" type

#### Non-rising stem gate valves DIN3352-F5

#### Non-rising stem gate valves JIS-10K

#### Non-rising stem Resilient soft seated gate valve ANSI125/150

Rising BS5163 metal seated gate valve

Rising stem BS3464 gate valve

Rising stem gate valve ANSI125-150

#### Rising stem gate valve JIS-10K

Rising stem gate valves DIN3352-F4

Thread ends NPT gate valves ANSI125

Globe valves ANSI Class125/150

Globe valves BS5152

Globe valves DIN3202-F1

Globe valves DIN3202-F32

Globe valves JISF7305-F7353

Globe valves JISF7306-F7354

Check valve lift type DIN3202-F1

Check valve swing type DIN3202-F6

Check valves flanged end swing type, resilient seated

Check valves swing class 125/150

Check valves swing type BS4090

Check valves swing type BS5153

Check valves wafer type

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Hebei Phoenix recommends that all installation is done by a registered plumber.

Refer:

Appendix 2 – Example of ball valve operation and installation instructions

Appendix 3 – Example of cast iron Y-strainer installation and maintenance instructions

Appendix 4 – Example of Hydroflow cast iron flanged Y-strainer technical information

### Hebei Phoenix cast iron ball valves and strainers QA processes

Hebei Phoenix stainless steel ball valves and fittings undertake testing and inspections of all products as part of the QA requirements.

Hebei Phoenix is an ISO9001 certified manufacturer - See Appendix 1

#### *Hebei Phoenix quality control processes:*

With their expertise, efficiency and enthusiasm, they can fulfil:

- Product, Manufacturer sourcing
- Samples and catalogues
- Business negotiation
- L/c and legal assistance
- Production & packing development
- QC control at workshop
- Pre-shipment inspection and final sample for customer approval
- Best shipping rate, Phoenix own Warehousing, Custom, Insurance assistance
- After sales service and re-order

### Contribution to Compliance

Hebei Phoenix cast iron ball valves and strainers are in full compliance with the requirements as set out in the New Zealand Building Code, as follows:

Building code	Requirement	Compliance evidence
B2 (Durability)  B2.3.1 (c) applies	(B2.3.1 Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the	

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	<p>lesser of the specified intended life of the building, if stated, or:</p> <p>(c) 5 years if:</p> <p>(i) The building elements (including services, linings, renewable protective coatings, and fixtures) are easy to access and replace, and</p> <p>(ii) Failure of those building elements to comply with the building code would be easily detected during normal use of the building.</p>	<p>As part of a plumbing system for supply of cold, hot or mixed water temperatures.</p> <p>These products can be used in residential and/or commercial buildings where cold, hot or mixed water temperatures water is required to be supplied.</p> <p>Not suitable for use in areas which are being permanently concealed such as behind concrete.</p> <p>Maintenance required is shown in the Maintenance and Installation Instructions.</p> <p>Proof of durability – Service history Hebei Phoenix products have been manufactured and supplied worldwide over the last 20 years.</p> <p>Warranty calls are at a minimum and within the quality principles of Hebei Phoenix. All Warranty claims are investigated, and corrective/preventive actions are implemented.</p>
<p>G12 (Water supplies)</p> <p>G12.3.2</p>	<p>G12.3.2 A potable water supply system shall be–</p> <p>(a) protected from contamination; and</p> <p>(b) installed in a manner which avoids the likelihood of contamination within the system and the water main; and</p> <p>(c) installed using components that will not contaminate the water.</p>	<p>Hebei Phoenix products comply with a variety of international product standards.</p> <p>All Hebei Phoenix products are designed, manufactured and inspected/tested.</p> <p>All Hebei Phoenix products are designed, manufactured and inspected/tested that is within the limitation set by the AS/NZS 3500 (NZBC).</p>

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## Design, construction and installation instructions

### Installation Instructions

Hebei Phoenix cast iron ball valves and strainer installation is to be done by registered plumbers. Installation Instructions are supplied with the product.

### Maintenance requirements

Service/cleaning instructions are available for download as mentioned above for all Hebei Phoenix stainless steel ball valves and fittings.

Please refer: [Hebei Phoenix](#)

### Warranty

Refer to Hydroflow for warranty terms and conditions.

These are dependent on factors such as temperature, environmental conditions, installation etc.

### Limitations

Limitations and use are specified in the technical information sheets obtainable from the website and differs by product.

### Quality assurance

The following certifications has been accredited to the product and/or manufacturer.

Hebei Phoenix has a variety of certifications including:

- ISO 9001 Quality Management

### Product support

Product data available are as shown above in section: Technical Information, Installation Instructions, Maintenance Instructions.

Full product support can be found at:

HYDROFLOW DISTRIBUTORS LTD  
221 Bush Road  
Rosedale, Albany, North Shore  
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Tel: +64 9 415 6151

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## Manufacturer

All Hebei Phoenix products are manufactured by Hebei Phoenix: [Hebei Phoenix](#) and imported and distributed by Hydroflow.

## Warnings and Bans

There is no warning or ban applicable on any Hebei Phoenix products, subject to the Building Act 2004, Section 26.



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## Appendix 1 – ISO 9001 certificate



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# QUALITY MANAGEMENT SYSTEM CERTIFICATE

NO: 25323QZ0217ROS

This is to hereby certify that the organization  
**Hebei Phoenix Enterprises Co., Ltd**

Unified social credit code:91130102746853149C

Registered address:Floor 15, Tower A2, Times Ark Bldg. No.342  
Heping E. Rd. Shijiazhuang, Hebei, 050011, China.

P.C.:050011

Business address: Floor 15, Tower A2, Times Ark Bldg. No.342 Heping  
E. Rd. Shijiazhuang, Hebei, 050011, China.

P.C.:050011

Quality management system conformity with standard:

**GB/T19001-2016/ISO9001:2015**

The certification scope of the following:

Hardware products(Gardening metal products, metal wire  
mesh, pipeline products) for sale

The period of validity:

Date of issue: August 11, 2023

Valid date:August 10, 2024

First registration date:  
August 11, 2023

Valid date of registration:  
August 10, 2026



Address: Room 1307, 13F, Building 1, No.168, Beiyuan Road, Chaoyang District, Beijing  
Telephone:010-53352039



Scan the two-dimension code query the information of certification  
certificate and certification status.  
Also available on the company web site:www.zjubond.cn  
Certification and Accreditation Administration of the People's Republic  
of China:www.cnca.gov.cn  
Please use the certificate along with the notice of supervision conclusion  
within the required expiry date.

## Appendix 2 – Example of ball valve operation and installation instructions



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## Operation and installation Manual Ball Valves

Dear customer or assembler or user,

These operation and installation manuals are intended to give you the knowledge, which is necessary for you to be able to carry out the mounting and adjustment of the ball valves rapidly and correctly. Please read these instructions carefully and pay particular attention to the advice and warning notes. Only instructed and qualified technician should mount, adjust or maintain the ball valves.

If you have any questions in relation to the ball valves, please don't hesitate to contact us.

## Products information:

Stainless steel ball valves     DN8-DN100

## General advice

### 1.     Validity

These mounting and installation manual applies to two ends connection thread ball valves.

### 2.     Inward monitoring

2.1.   Please observe all local plumbing codes and building codes.

2.2.   Before installation, unpacked the new products and carefully inspect the product and supply tubing for any sign of damage and replace if necessary. Return the product to the carton until you are ready to install it.

2.3.   Before mounting or maintenance, please assure that the pressure will be discharged. When discharging, the discharge direction should not be direct to the operator.

2.4.   Please read the maximum pressure or other data indicated on the label.

2.5.   Volatile gas, toxic medium is not suitable for the use of this kind of valve.

2.6.   The maximum pressure of use are according to the label of valves

2.7.   The use of temperature    -20°C to +160°C

PS: The pressure will decrease when the temperature increased.

### 3.     Safety advice

We do not know the circumstances at the time of the mounting/adjustment/ maintenance, you may find the advice on hazards in the following descriptions

which are not relevant to you. Please observe the advice which applies to your situation. Safety advice for mounting and adjustment and maintaining and repair.

- 3.1 Switch off all the devices affected by mounting or repair. If appropriate, isolate the devices from the mains; assure that it will not cause the potential danger.
- 3.2 In the event of a fault in the valve(in a plant which is in operation),inform the shift foreman /safety engineer or the works manager without delay about the fault, in order to avoid an outflow/overflow of chemicals or discharge of gases in good time by means of suitable measures.
- 3.3 Don't carry out any mounting, disassembly and maintaining under pressure, it should be firstly pressure relief before any operation.
- 3.4 If necessary, set up the warning signs.
- 3.5 The operator should observe the relevant professional safety and accident prevention regulations.
- 3.6 Carry out the starting and the adjustments only in accordance with the instructions described in this documentation.
- 3.7 These valves must be used only for a purpose corresponding to their construction; these valves must be used within the values specified in the technical data.
- 3.8 The operating of the valves outside the nominal pressure and temperature range could destroy the inner sealing/parts and the body.
- 3.9 After the mounting and maintenance or repair, check the tightness of the pipe

connections. Check the right function of all safety devices, accessories.

## **4. Ball valves**

Before mount, adjust, start, operate or disassemble a ball valve you have to read the safety advice

### **4.1 Before installation**

- Check all the valves and pipe fittings before installation to ensure proper length.
- Check the ball valve size.
- Clean up the pipes and valves in which the ball valve will be mounted, ensure there is no debris which cause damages on the valves.

### **4.2. Installation process**

- Fit the two female thread connections of the ball valve on the male thread side of the steel pipe by wrench firmly.
- Check the tightness of all connections
- The ball valves and two steel pipes form a water connecting piece in the pipe system.
- Turn on the main water supply, and check the leakage, adjust as needed
- It is not allowed to exceed the seal load and the applicable temperature

### **4.3. Maintenance**

- It is recommended to check the valve regularly. When any parts is damaged, it must be repaired
- After disassembling the valve, it is suggested to replace new sealing.
- When ball valve is under pressure, the replacement of parts is not allowed.
- Normally the ball valve is maintenance free. They need to be periodically

controlled for function and tightness:

- > Check the tightness of the gland.
- > Check the tightness of the ball seats.

Ball valves with multiple parts design could be disassembled to exchange the seals and the ball.

--Readjusting of the gland. For decreasing tightness at the stem, the gland could be readjusted. By keeping the nominal pressure you have to tighten up the screw of the gland until the tightness of the gland will be restored. After the readjusting, the ball of the valve must be able to turn slightly.

--Exchange of the ball and the sealing. For decreasing tightness the ball valve or the sealing of the valve can be exchanged. Corresponding to the wear of the parts exchange the sealing and the ball. When replacement of the ball you should also exchange the sealing. You should cut off the media flow and relieve the media pressure and keep ready some fit tanks to collect leaking liquids

#### **4.4. Remark**

--The installation people must have the official operative certificate issued.

### **5. Attentional matter for the swing check valve, 1pc wafer disc check valve and 2pc/3pc vertical spring check valve**

5.1 Before installation, the check valve mark should be checked whether its contents conform with the requirement. The interior should be checked and should not have filth attached

5.2 The check valves are generally suitable for clean medium, not for medium



containing solid particles and medium with large viscosity.

5.3 The check valves can only be mounted vertically!

The flow direction of the medium is from bottom to the top.

5.4 Please note that the direction of the arrow marked on the body of valve must be consistent with the flow direction of the medium in the pipeline.

## **6. Attentional matter for the gate valves and globe valves**

6.1 Before installation, the valve mark should be checked whether its contents conform with the requirement. The interior and seal faces should be checked and should not have filth attached.

6.2 Gate valves and globe valves are suitable for clean medium, not for medium containing solid particles and medium with large viscosity, so as not to damage the disc and lead to leakage.

6.3 The valves are required to keep fully open or close and not allowed to open partially and to make the valve to be used as a flow regulation device, otherwise, the seal face is easily damaged if the fluids flow at high speed.



## Appendix 3 – Example of cast iron Y-strainer installation and maintenance instructions



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# **Operation Instruction for Cast Iron Y-strainer under MSS Standards**



## 1.Purpose and Performance Specification:

The Y type strainer is used in various pipeline of water, oil and gas to filter and purify medium.

### Performance Specification

Nominal diameter	2" ~ 12"		14" ~ 24"	
Nominal Pressure	125Psi			
Shell Test (MPa)	2.41		1.83	
Working Temperature (°C)	-29 ~ 65	232	-29 ~ 65	175
Working Pressure (MPa)	1.38	0.86	1.03	0.70
Applicable medium	Water, oil, gas (nonflammable、non-toxic)			

## 2.Structure Specification

1). Structure design refers to ASME B16.1

2).Flange dimensions confirm to AS2129 TABLE E/D, and end face machining confirms to MSS SP-6

3). Testing confirms to ASME B16.1

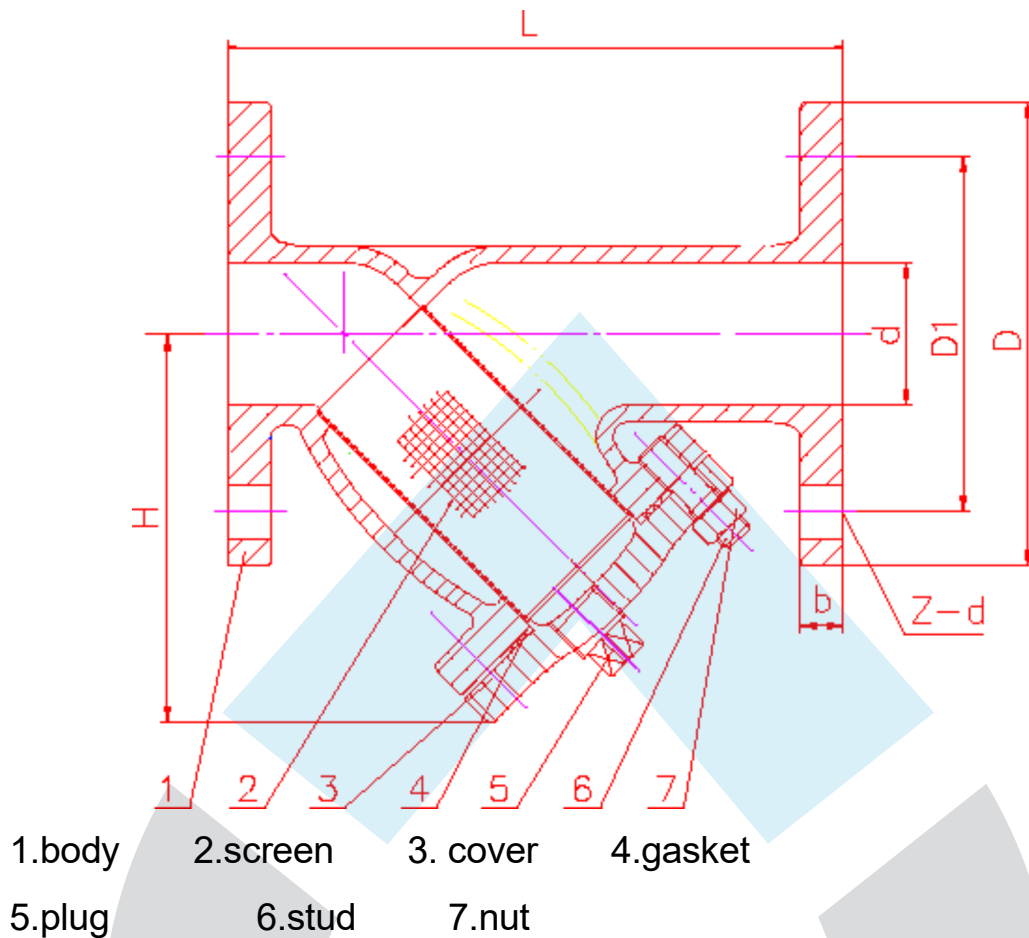
4). Structure Features:

a、 Adopting stainless steel screen

b、 Y type

c、 Having a drain hole.

### 3. Structure drawing:



4、 See table 1 for main outside dimension.

5、 Main parts material

Name	Material
Body, cover	EN1561 EN-GJL-200(HT200)or EN1563 EN-GJS-450-10(QT450-10)
Screen	ASTM A240 TY304
Gasket	Flexible graphite + steel plate
plug	EN-GJMB-300-06

Table 1

Nominal Diameter DN	d	L	D	D1	b	Z-d	H
2 "	50	230	150	114	19	4-18	135
2½ "	65	290	165	127	19	4-18	185
3 "	80	310	185	146	19	4-18	200
4 "	100	350	215	178	22	8-18	235
5 "	125	400	255	210	22	8-18	285
6 "	150	480	280	235	22	8-22	300
8 "	200	600	337	292	25	8-22	385
10 "	250	730	405	356	25	12-22	458
12 "	300	850	457	406	29	12-25	510

#### 6. Notes of storage, installation, operation and maintenance

- 1). Strainers shall be stored in dry warehouse. Storing or stacking of products in the open air is not permitted. Two ends shall be protected with protectors.
- 2). Strainers storing for a long time shall be inspected periodically and the dirt on valves shall be cleared off. Rustproof oil on external machining faces shall be periodically replaced to prevent from rusting.
- 3). Strainers shall be carefully inspected to confirm that operating conditions conform to markings on valves or stipulations on nameplates before installation, and strainer cavity shall be cleaned.
- 4). Standard wrenches shall be used to tighten symmetrically and alternatively bolts connecting flange when installation. Bending or over tight of bolts shall be avoided.

5). This Strainer shall be installed in horizontal pipe and drain hole shall be in the lowest position.

6). Drain contamination shall be done periodically.

7). Breakdowns that may occur, causes and eliminate methods.

breakdown	Causes of breakdown and Eliminate method
Flange connecting part leakage	<ol style="list-style-type: none"><li>1. Flange connecting stud loose and nuts shall be loosened and re-tightened.</li><li>2. Gasket invalid and replace gasket</li><li>3. There is dirt between flange sealing faces, and it shall be removed to clean.</li></ol>
Poor circulation of medium	Screen blocked by dirt and plug shall be removed to discharge dirt.
Screen invalid	Repair or replace screen.

## Appendix 4 – Example of Hydroflow cast iron flanged Y-strainer technical information



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## Cast Iron Flanged Y Strainer 50mm - 300mm



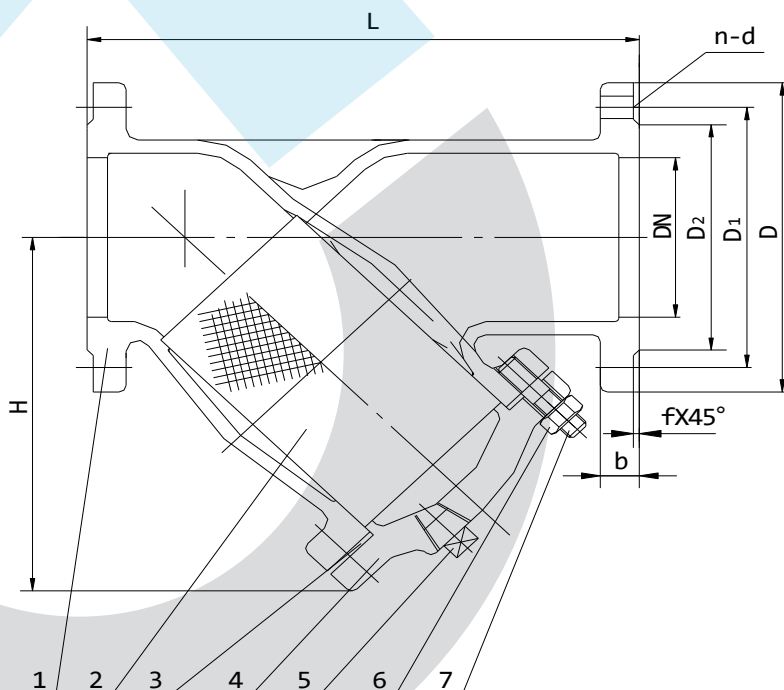
Pressure Rating: PN 16

Flange: Table E

Maximum Operating Temperature: 120 Degrees Celsius

### MATERIALS

No.	PART NAME	MATERIAL (C.I.)
1	BODY	GG25
2	SCREEN	304SS
3	GASKET	GRAPHITE+STEEL
4	COVER	GG25
5	PLUG	304SS
6	NUT	304SS
7	STUD	304SS



### DIMENSIONS(mm)

NPS	DN	L	D	D1	D2	b	n-d	f	H
2	50	230	152	114	90	19	4-18	3	135
2.5	65	290	165	127	103	19	4-18	3	185
3	80	310	185	146	122	19	4-18	3	200
4	100	350	216	178	154	22	8-18	3	235
5	125	400	255	210	184	22	8-18	3	285
6	150	480	280	235	207	22	8-22	3	300
8	200	600	337	292	264	25	8-22	3	385
10	250	730	405	356	319	25	12-22	3	458
12	300	850	457	406	370	29	12-25	4	510



## Cast Iron Flanged Y Strainer 50mm - 300mm

FILTER MESH DIMENSIONS(mm)

DN	Mesh ØD	L	e í é ° q D à § è i m d ù ü × J m` a		
50	56mm	90mm	1.6mm	0.5mm	2.5mm
65	78mm	120mm	1.6mm	0.5mm	2.5mm
80	89mm	130mm	1.6mm	0.5mm	2.5mm
100	110mm	180mm	3mm	0.5mm	4.5mm
125	135mm	210mm	3mm	0.5mm	4.5mm
150	160mm	240mm	3mm	0.5mm	4.5mm
200	210mm	300mm	3mm	0.8mm	4.5mm
250	270mm	370mm	3mm	0.8mm	4.5mm
300	320mm	450mm	3mm	0.8mm	4.5mm

Filter Mesh - SS304



### Flow Chart

