Sure Flow Equipment Inc.

Check Valves

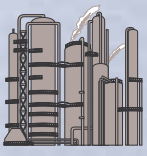
www.sureflowequipment.com

Contents

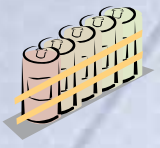
Commitment to Quality

Table of Contents

Service Applications



Chemical Plants

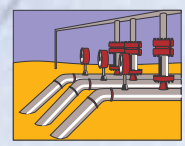


Food Processing Facilities

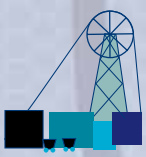
Sewage Treatment Industry

Steel Mills

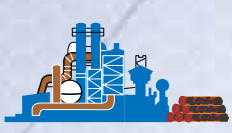
Cement Manufacturing



Petrochemical



Mining Operations



Pulp and Paper

Commitment to Quality

Sure Flow Equipment Inc. features complete custom engineered design and fabrication expertise within a quality focused state-of-the-art manufacturing facility. Commitment to quality, customer satisfaction and continual improvement is integral to our manufacturing processes and ensures custom engineered strainers meet your design specifications and stringent quality requirements. We've made it easy for you to place your order with confidence.

Sure Flow Equipment Inc. provides industry with Custom Engineered Fabricated Strainers to many design codes. Custom products are designed and manufactured to ASME SECTION VIII, DIV 1, Current Edition. ASME "U" Code Stamp and ASME "UM" Code Stamp are available on certain products as specified.

The Sure Flow Equipment Inc. list of Certifications includes:

ISO 9001:2008 Certificate of Registration

ASME "U" Code Stamp Certificate of Authorization and ASME "UM" Code Stamp Certificate of Authorization (ASME Boiler and Pressure Vessel Code; ASME Section VIII, Div 1, Current Edition);

National Board Certified and authorized to apply the "NB" Mark for pressure vessels and/or pressure retaining items manufactured in accordance with ASME "U" Code Stamp and ASME "UM" Code Stamp;

TSSA Certificate of Authorization (Technical Standards & Safety Authority) for the manufacture of pressure vessels in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 and CSA Standard B51, Boiler, Pressure Vessel and Pressure Piping Code.

CE Mark is available

C-TPAT Certified (Customs-Trade Partnership Against Terrorism)

Recognized by PIP (Partners In Protection) for our C-TPAT status

Member of FCI (Fluid Controls Institute) and Vice Chairman of Pipeline Strainer Section

Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Retainerless Check Valves - FE Series

The **Sure Flow Check** wafer check valve is a precision engineered, fully developed product at the forefront of pipe system technology. **Sure Flow Check** can be installed with confidence into offshore or onshore pipeline systems on product or service lines, wherever non-return protection is required.

Manufactured to meet API specifications, **Sure Flow Check** meets all the key criteria and in the vitally important area of comparative weights is actually lighter than other wafer check valves.

Sure Flow Check offers other operational benefits. **It is light, tight, strong, compact and cost effective.**

Sure Flow Check is a precision engineered dual plate wafer check valve. It has been designed specifically for its environment and its duty. Every component has been carefully chosen only after matching its performance requirements with value analysis criteria.

The **Sure Flow Check** Valve meets API 594 wafer check valve standard (except face to face dimensions of ASME 125 cast iron valves from 2-1/2" to 12" in which case they meet the Industry Standard).

- ASME B16.5 flange dimension
- ASME B16.47 above 24", flange dimension
- API 594 - materials, design & face to face
- API 605 (B16.47), flange dimension
- API 6A - flange dimension & face to face
- API 6D - materials
- API 598 - testing
- ASME B16.34 - materials, wall thickness

Double Door or Dual Disc Available
Wafer - Flanged - Hub - Lug

Range of Valves

Sizes:
- 2" to 72"

Pressures:
- ASME Class 125 & 250
- ASME Class 150 to 2,500
- API 2,000# to 10,000#

Temperatures:
- Minus 400°F. to 1,200°F.

Seating:
- Resilient or Metal to Metal

Materials:
- Cast or Forged
- Cast Iron, Cast Steel
- Stainless Steel & Bronze

Types:
- Flanged
- Flangeless (Wafer Style)
- Lug (Drilled or Threaded)
- Butt Weld
- Hub End (for Clamp Joints)

Sure Flow Equipment Inc.
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Retainerless Check Valves - FE Series

Lighter

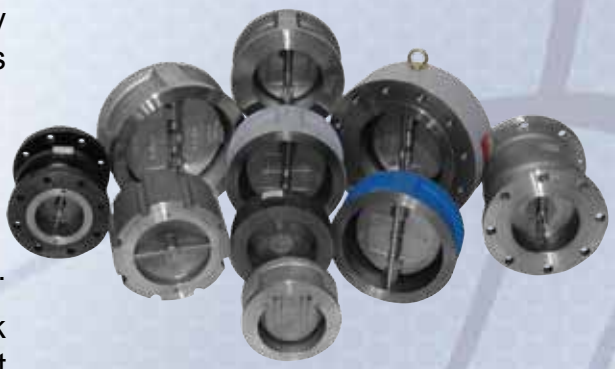
Wafer check valves are recognized as being substantially lighter in weight than conventional swing check valves of the same size and pressure class.

For example:

6” Class 150 swing check weighs 175 lbs.

6” Class 150 **Sure Flow Check** weighs only 30 lbs.

This weight advantage means that the whole pipework system is lighter, consequently the pipework support structure can also be lighter and installation costs reduced.



Stronger

Lighter weight does not mean, however, that strength has been sacrificed. In fact a **Sure Flow Check** is actually stronger than the equivalent length of pipe. Ribs around the side wall support the flange faces.

The **Sure Flow Check** Valve provides the following important features:

- Twin plate, flat seat design for efficient sealing.
- Long leg spring(s) allows the plates to open and close without seat scrubbing.
- Valves 14” and larger are fitted with patented independent spring(s) as a standard feature.
- Lower head loss than swing checks above 6”.
- Valves with soft seats have bubble tight closure to API 6D.
- Valves with metal/hardfaced seats have low leakage in accordance with API 598.
- Simplicity of installation is a key feature.
- A wide range of seat options is available.

The strong central rib gives rigidity to the body, protects the mechanism from damage by foreign objects in the flow and also provides a broad seating area for the plate heels.

The pins which support the plates and anchor the spring are substantial in order to withstand the pressures imposed on them by the flow.

Retainerless Check Valves - FE Series

If the rib profile and size are reduced or the pins are slimmed down, the valve might not provide the safety margin in operation which is one of the main reasons for having a wafer check valve in the first place.

Compact

Sure Flow Check meets the internationally accepted API 594 standard for steel valves. A 6” Class 150 valve has a face to face measurement of just 3” compared with a swing check valve’s 14” face to face dimension. A **Sure Flow Check** fits completely inside the flange bolt PCD and therefore external installation is straightforward.

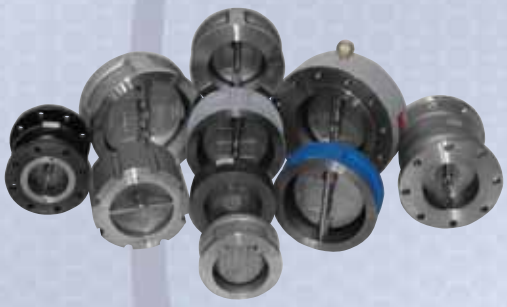
Non-Slam

Sure Flow Check is a non-slam check valve because it operates on flow cessation, not flow reversal. The normal position of the plates is closed, held against the seat by the unique spring design. As flow begins, the heels of the two plates are lifted off the seat face on the central rib.

This cracking pressure is less than 2 psi across most of the range. As flow increases, the plates then pivot against the spring pressure. Since the heels have already lifted off the rib seat there is no scrub or wear, either on the rib, body or plate seating surfaces. A pressure of only 4 psi is required to keep the plates fully open.

When flow stops and that pressure is removed the spring closes the plates. Flow reversal is then stopped by the closed **Sure Flow Check** valve and in fact any back pressure only serves to make the valve seal more tightly.

Tight



The long leg spring design - with a single anchor point - is a unique feature of the **Sure Flow Check** design. Coupled with floating plates for minimum seat wear and the right choice of seat to suit the service requirements, this gives the best combination to meet API 598 requirements.

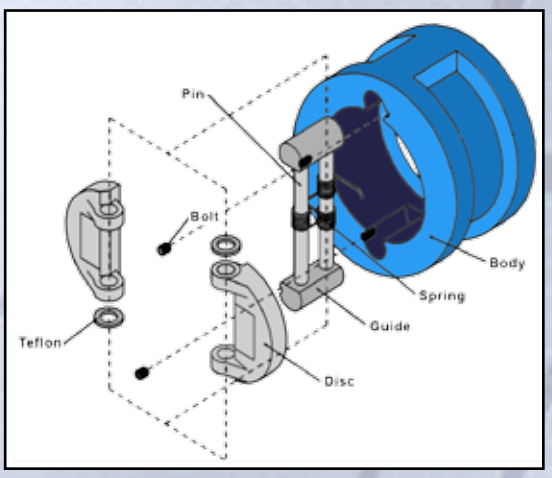
The long spring leg ensures closing tension is applied to the right part of the plate while allowing the plate heels to float on opening. For valves 14” and larger, the spring is anchored to the stop pin to ensure that both plates open and close independently. If the spring is not anchored, then the opening of one plate transfers pressure through the spring to make it more difficult for the other plate to open.

Retainerless Check Valves - FE Series

Sure Flow Retainerless Body Design

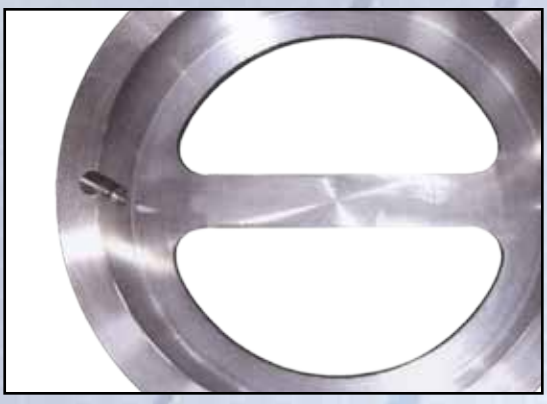
In standard or competitive designs, some manufacturers drill four holes through the body of the check valve to facilitate the installation of a hinge pin and stop pin. The valves are then sealed by four pipe plugs. These holes are potential leak paths from the body of the valve.

Sure Flow Equipment Inc. utilizes an internal stop pin and hinge pin which are machined into the cavity of the body wall. This design eliminates a potential shell or body leak path.



Lapped Body / Disc Seal

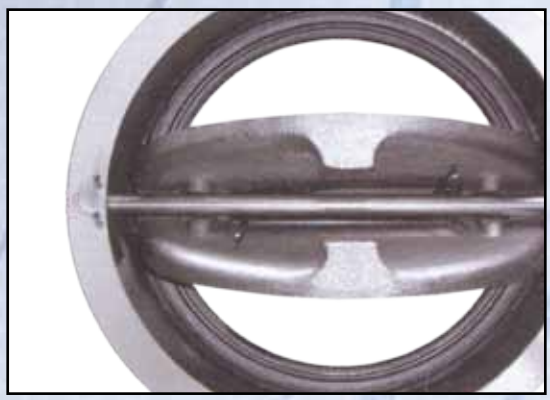
All valves meet or exceed API 598. When it comes to the **Sure Flow Check** metal to metal valve, standard with stellite B12 overlay on the disc, an additional special machining cure is performed to provide a maximum flatness and a fine, lapped finish. The **Sure Flow Check** disc provides an almost zero leakage on metal seated valves with no additional cost.



Shock Bumpers

Sure Flow Equipment Inc. has cast “Shock Bumpers” into the reverse side of each of the discs (flappers). Both sides of the disc meet or touch in the fully open position, thus preventing them from contact with the internal pins. This reduces the force on the hinges to a minimum.

In some competitive designs the disc (flapper) strikes the stop pin in the fullly open position, creating a lever force which could cause the hinge pin to break. The Shock Bumpers eliminate this potential problem.



Seat Life

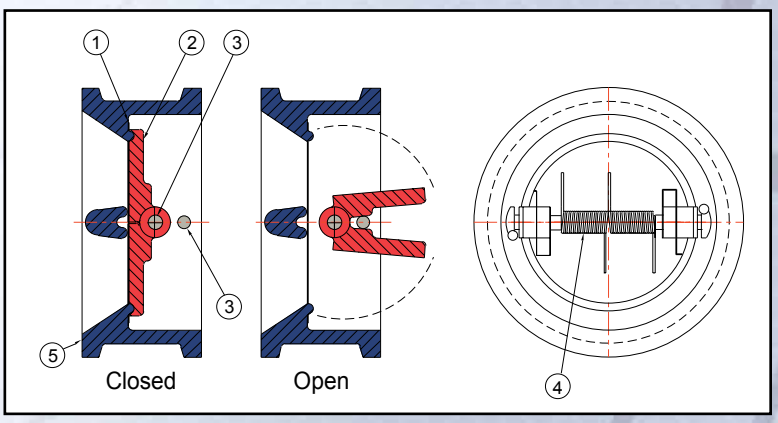
Increased seat life is obtained by eliminating the problem of dragging on the seat when opening. The soft seated valve has a seat molded to the body by use of a heating temperature suitable to the materials.

Retainerless Check Valves - FE Series

Standard Materials of Construction Body and Plate Castings

- ASTM A216 Grade WCB Carbon Steel (0.22% Carbon Max.)
- ASTM A217 Grade CA15 410 Stainless Steel
- ASTM A351 Grade CF8M 316 Stainless Steel
- BS 1400 Grade AB2 Aluminum Bronze (ASME 150 and 300 Series)

Other materials are available on request.



Construction	
Item	Description
1	Seat / Seal
2	Discs
3	Shaft
4	Torsion Spring
5	Cast Body

Spring Selection

Springs	Maximum Operating Temperature
316 Stainless Steel	248°F (120°C)
Inconel 600	600°F (315°C)
Inconel X 750	1000°F (537°C)

For temperatures up to 600°F (315°C), Inconel springs will be furnished as standard on all valves that are ordered with metal and Viton seats.

For service conditions above 600°F (315°C), Inconel X springs should be specified.

Refer to ordering information for Seal selection.

Ordering Information / Figure Number

Example: 0 2 0 0 F E 1 5 0 C S M I L

- Size
- Wafer Duo-Disc Style
- Pressure Classification
- Body Material
- Disc Material
- Seat Material
- Spring Material
- End Connections

Pressure Classification						
Code	150	300	600	900	1500	2500
ASME	150	300	600	900	1500	2500

Spring Material		
Code	Material	Max. Temp. °F
I	316 Stainless Steel	248
X	Inconel 600	600
S	Inconnel X 750	1000

Body and Flapper Materials		
Code	Material	Specification
C	Carbon Steel	ASTM A216 Grade WCB
S	Stainless Steel	ASTM A351 Grade CF8M

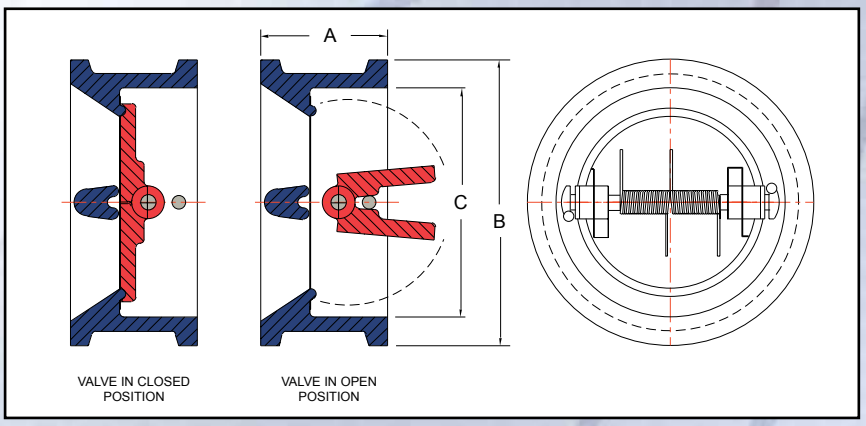
Seat Material	
Code	Material
M	Metal
V	Viton

End Connections	
Code	Connection
R	Serrated Gasket Finish
L	Lug 2" - 10"
F	Flanged 12" - 24"

Retainerless Check Valves - FE Series

ASME Class 150 to ASME Class 600 Wafer Style Body

Cv Values																							
Size	2”	2 1/2”	3”	4”	5”	6”	8”	10”	12”	14”	16”	18”	20”	24”	26”	28”	30”	32”	36”	40”	42”	48”	54”
Cv	48	100	181	291	494	705	1,795	2,563	4,259	5,436	7,355	9,537	12,004	17,804	30,000	33,600	38,400	48,000	55,200	84,000	96,000	117,600	141,300



ASME Class 150 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/8	4 1/8	2 3/8	6
2 1/2”	2 3/8	4 7/8	2 5/16	8
3”	2 7/8	5 3/8	3 3/4	10
4”	2 7/8	6 7/8	4 1/2	17
5”	3 1/4	7 11/16	5 11/16	23
6”	3 7/8	8 3/4	6 5/8	33
8”	5	11	8 5/8	58
10”	5 3/4	13 3/8	10 3/4	109
12”	7 1/8	16 1/8	12 5/8	180
14”	7 1/4	17 3/4	13 11/16	206
16”	7 1/2	20 1/4	16 11/16	263
18”	8	21 5/8	18	334
20”	8 5/8	23 7/8	20 1/4	430
24”	8 3/4	28 1/4	23 3/4	582
26”	11 1/4	30 1/2	24 3/4	1,151
28”	12 5/8	32 3/4	27 5/8	1,293
30”	12	34 13/16	30 1/8	1,356
32”	14	37	30 11/16	1,746
36”	14 1/2	41 1/4	34	2,125
40”	17	45 3/4	38 13/16	3,011
42”	17	48	41 13/16	3,795
48”	20 5/8	54 1/2	47	5,566
54”	21 1/4	60 7/8	50 1/2	6,831

ASME Class 300 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/8	4 3/8	2 3/8	6
2 1/2”	2 3/8	5 1/8	2 5/16	8
3”	2 7/8	5 7/8	3 3/4	13
4”	2 7/8	7 1/8	4 1/2	20
6”	3 7/8	9 7/8	6 5/8	38
8”	5	12 1/8	8 5/8	71
10”	5 3/4	14 1/4	10 3/4	124
12”	7 1/8	16 5/8	12 5/8	195
14”	8 3/4	19 1/8	13 3/4	339
16”	9 1/8	21 1/4	16 11/16	428
18”	10 3/8	23 1/2	18	595
20”	11 1/2	25 1/2	20 1/4	774
24”	12 1/2	30 1/2	23 3/4	1,207
26”	14	32 7/8	24 3/4	1,569
28”	15	35 3/8	27 5/8	1,946
30”	14 1/2	37 1/2	30 1/8	2,113
32”	16	39 5/8	30 13/16	2,598

ASME Class 600 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/8	4 3/8	2 3/8	6
3”	2 7/8	5 7/8	3 3/4	13
4”	3 1/8	7 5/8	4 1/2	25
6”	5 3/8	10 1/2	6 5/8	68
8”	6 1/2	12 5/8	8 5/8	127
10”	8 3/8	15 3/4	10 3/4	261
12”	9	18	12 5/8	324
14”	10 3/4	19 3/8	13 3/4	359
16”	12	22 1/4	16 11/16	683
18”	14 1/4	24 1/8	18	794
20”	14 1/2	26 7/8	20 1/4	1,159
24”	17 1/4	31 1/8	23 3/4	1,842
26”	18	34 1/8	24 3/4	2,474
28”	19	36	27 5/8	2,715
30”	19 7/8	38 1/4	30 1/8	3,211
32”	21	40 1/4	30 13/16	3,747

Notes:

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

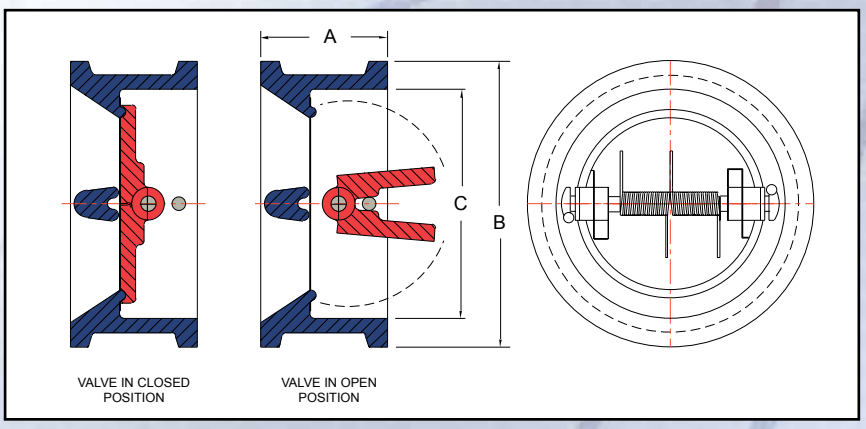
Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Retainerless Check Valves - FE Series

ASME Class 900 to ASME Class 2500 Wafer Style Body

Cv Values														
Size	2”	2 1/2”	3”	4”	5”	6”	8”	10”	12”	14”	16”	18”	20”	24”
Cv	48	100	181	291	494	705	1,795	2,563	4,259	5,436	7,355	9,537	12,004	17,804



ASME Class 900 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/4	5 5/8	2 3/8	16
3”	3 1/4	6 5/8	3 3/4	19
4”	4	8 1/8	4 1/2	38
6”	6 1/4	11 3/8	6 5/8	101
8”	8 1/8	14 1/8	8 5/8	213
10”	9 1/2	17 1/8	10 3/4	433
12”	11 1/2	19 5/8	12 5/8	640
14”	14	20 1/2	13 3/4	855
16”	15 1/8	22 5/8	16 11/16	1,123
18”	17 3/4	25 1/8	18	1,624
20”	17 3/4	27 1/2	20 1/4	1,951
24”	19 1/2	33	23 3/4	3,079

ASME Class 1500 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/4	5 5/8	2 3/8	16
3”	3 1/4	6 7/8	3 3/4	21
4”	4	8 1/4	4 1/2	40
6”	6 1/4	11 1/8	6 5/8	101
8”	8 1/8	13 7/8	8 5/8	213
10”	9 3/4	17 1/8	10 3/4	463
12”	12	20 1/2	12 5/8	678
14”	14	22 3/4	13 3/4	1,045
16”	15 1/8	25 1/4	16 11/16	1,240
18”	18 7/16	27 3/4	18	2,102
20”	21	29 3/4	20 1/4	4,643

ASME Class 2500 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/4	5 3/4	2 3/8	30
3”	3 3/8	7 3/4	3 3/4	46
4”	4 1/8	9 1/4	4 1/2	92
6”	6 1/4	12 1/2	6 5/8	190
8”	8 1/8	15 1/4	8 5/8	285
10”	10	18 3/4	10 3/4	555
12”	12	21 5/8	12 5/8	814

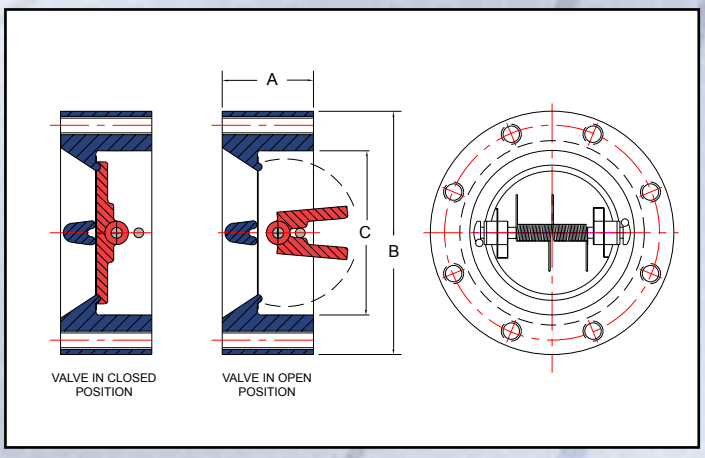
Notes:

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Retainerless Check Valves - FE Series

ASME Class 150 and ASME Class 300 Lug Style Body

Cv Values						
Size	2”	3”	4”	6”	8”	10”
Cv	48	181	291	705	1,795	2,563



ASME Class 150 Lug Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/8	6	2 3/8	18
3”	2 7/8	7 1/2	3 3/4	30
4”	2 7/8	9	4 1/2	48
6”	3 7/8	11	6 5/8	81
8”	5	13 1/2	8 5/8	159
10”	5 3/4	16	10 3/4	235

ASME Class 300 Lug Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
2”	2 3/8	6 1/2	2 3/8	20
3”	2 7/8	8 1/4	3 3/4	35
4”	2 7/8	10	4 1/2	58
6”	3 7/8	12 1/2	6 5/8	114
8”	5	15	8 5/8	197
10”	5 3/4	17 1/2	10 3/4	291

Notes:

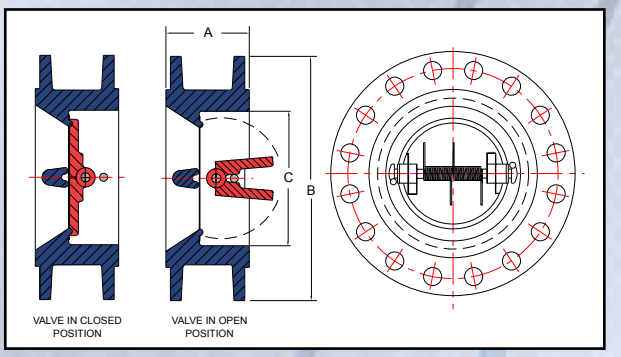
Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Retainerless Check Valves - FE Series

ASME Class 150 to ASME Class 600 Flange Style Body

Cv Values								
Size	12”	14”	16”	18”	20”	24”	26”	28”
Cv	4,259	5,436	7,355	9,537	12,004	17,804	30,000	33,600

Size	30”	32”	36”	40”	42”	48”	54”
Cv	38,400	48,000	55,200	84,000	96,000	117,600	141,300



ASME Class 150 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
12”	7 1/8	19	12 5/8	230
14”	7 1/4	21	13 11/16	283
16”	7 1/2	23 1/2	16 11/16	364
18”	8	25	18	438
20”	8 5/8	27 1/2	20 1/4	569
24”	8 3/4	32	23 3/4	784
26”	11 1/4	34 1/4	24 3/4	1,316
28”	12 5/8	36 1/2	27 5/8	1,472
30”	12	38 3/4	30 1/8	1,576
32”	14	41 3/4	30 11/16	2,135
36”	14 1/2	46	34	2,682
40”	17	50 3/4	38 13/16	3,600
42”	17	53	41 13/16	4,177
48”	20 5/8	59 1/2	47	6,386
54”	21 1/4	66 5/8	50 1/2	8,164

ASME Class 300 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
12”	7 1/8	20 1/2	12 5/8	261
14”	8 3/4	23	13 3/4	405
16”	9 1/8	25 1/2	16 11/16	519
18”	10 3/8	28	18	711
20”	11 1/2	30 1/2	20 1/4	936
24”	12 1/2	36	23 3/4	1,417
26”	14	38 1/4	24 3/4	1,796
28”	15	40 3/4	27 5/8	2,181
30”	14 1/2	43	30 1/8	2,343
32”	16	45 1/4	30 13/16	2,861

ASME Class 600 Dimensions (Inches)				
Size	A	B	C	Weight (LBS)
12”	9	22	12 5/8	415
14”	10 3/4	23 3/4	13 3/4	577
16”	12	27	16 11/16	835
18”	14 1/4	29 1/4	18	1,164
20”	14 1/2	32	20 1/4	1,417
24”	17 1/4	37	23 3/4	2,249
26”	18	40	24 3/4	2,745
28”	19	42 1/4	27 5/8	3,236
30”	19 7/8	44 1/2	30 1/8	3,752
32”	21	47	30 13/16	4,420

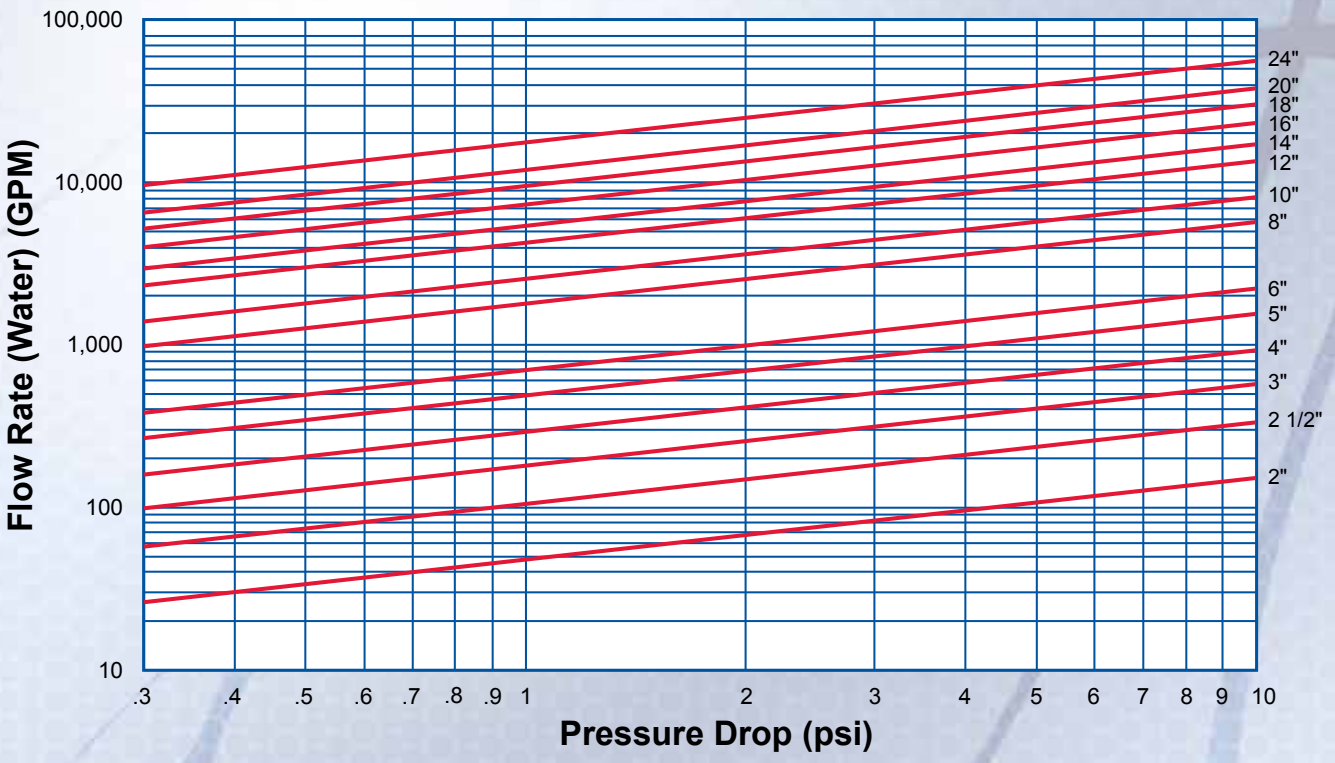
Notes:

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Retainerless Check Valves - FE Series

Flow Rate Vs. Pressure Drop - FE Series Check Valves

ASME Class 150 to ASME Class 2500



Notes:

- The above chart is for theoretical calculations ONLY. Please contact our office with your exact specifications and you will be provided with factory calculations.
- The Curves shown above relate to valves provided with standard rated springs.
- Stronger springs may be required to ensure faster reaction if very large changes in velocity occur.
- We will provide valves to match your perfomance requirements.
- It should be borne in mind that a media (liquid) velocity in the pipeline of 10 ft per second is considered to be desirable for normal applications.

Installation Data

The **Sure Flow Check** valve is designed so that it is centralized between the flanges when the stud bolts are in position. The outside diameter of the body is equal to the bolt circle PCD minus the diameter of one bolt.

It is suitable for use in a variety of orientations. In horizontal lines the valve is installed with the pins vertical (i.e. with the pin retainers at the top). For sizes 6” and upwards the valve is tapped to take an eyebolt for lifting.

Arrows cast into the body indicate the normal direction of flow.

Before initial installation it is advisable to open the plates by hand since, if the valve is held in store for a period of time, the corrosion inhibitor may have caused the plates to stick to the body and line pressure may not be sufficient to break this seal.

If the bottom half of the studs are installed first they will serve as a platform to support the valve while the gaskets and other studs are inserted. Similarly, if the valve is to be removed from the line, the top half of the studs should be removed and the bottom half slackened.

Retainerless Check Valves - FE Series

Seat Options

The right seat is critical for the correct functioning of the valve in its designated service. **Sure Flow Check** offers a wide range of seat options.

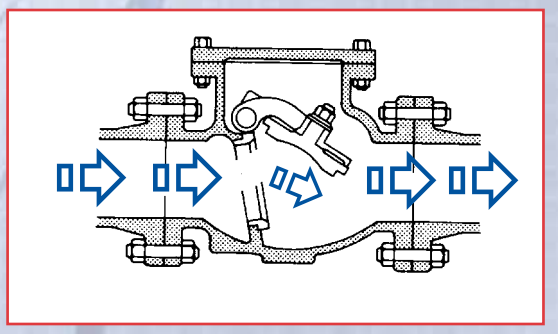
Metal to metal seats can be either the body/plate parent material or a hardfacing of other material, overlaid by deposition.

For soft seated valves standard elastomers are vulcanized for maximum security.

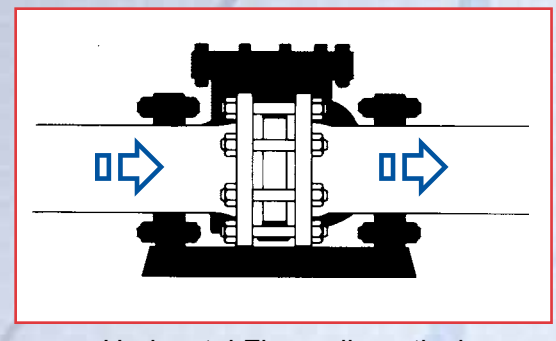
On high pressure class valves the seat is set into a groove for further safety.

Simple Installation

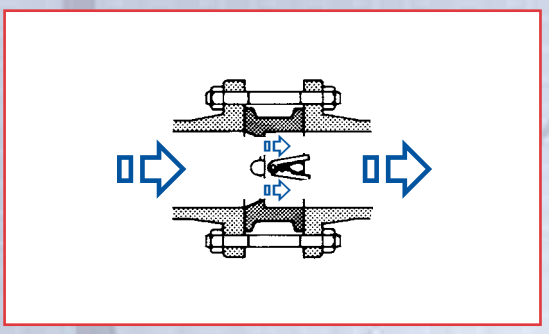
Simplicity and speed of installation are of paramount importance for the process or pipeline engineer. **Sure Flow Check** is simply installed between the flanges. A raised face (serrated or smooth finish), a RTJ, profile hub and butt weld ends can be provided. Only one set of studs is required as **Sure Flow Check** fits inside the bolt circle PCD. If the valve needs to be taken out of the line, only half the bolts need to be removed, reducing the amount of work to be done and providing a retained link for the two pipe flanges.



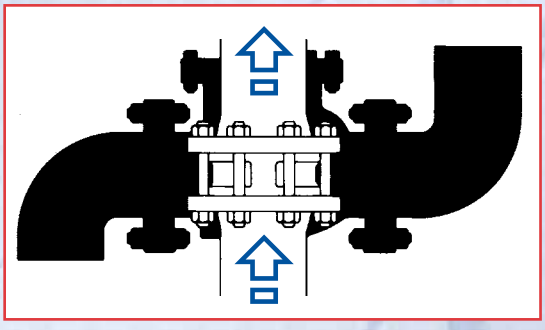
Conventional swing check valve



Horizontal Flow - rib vertical



Sure Flow Check dual plate wafer check valve



Vertical Flow

Quality From Start To Finish

Quality Counts

Our quality starts with design and engineering, continues through development and testing, to manufacture and certification. Our technical and sales support services are vital ingredients in maintaining the overall quality of our products. The stringent quality control, inspection and testing procedures we apply are contained within the Documented Quality System.

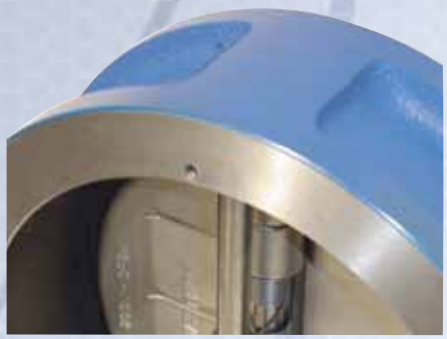
Manufactured to API 594 and tested to API 598

Quality is manufactured not inspected

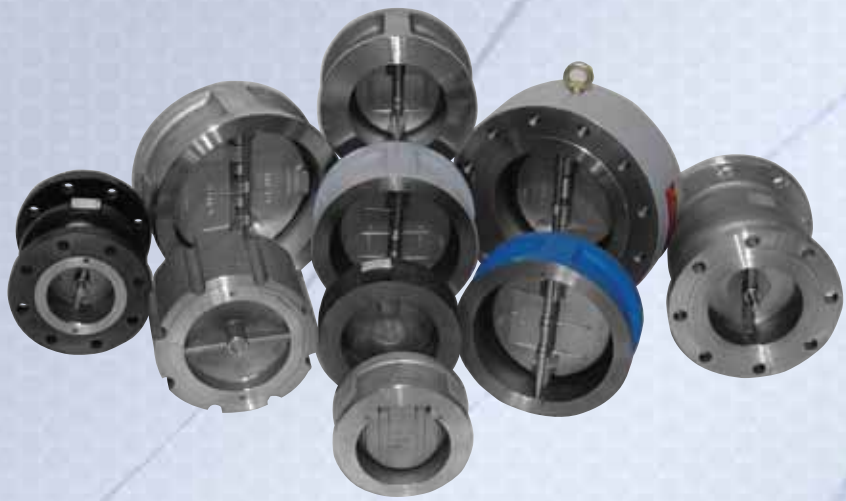
Our operatives are responsible for the quality and accuracy of their work and for ensuring that it is in accordance with the appropriate working drawings and specifications. Our Q.A. Department checks initial compliance throughout all aspects of manufacture from the receipt of materials to the end of the machining process.

Our Quality Assurance Department remains the ultimate authority in guaranteeing that materials, engineering and methods are in full accordance with agreed specifications and established procedures. Through a combination of these procedures we can confidently fulfil all requirements for material conformity and traceability and for full certification.

When you specify **Sure Flow Check** valves, you can be confident that not only are you making an investment in quality and reliability, but equally important, you know the service starts with the sale.



All requirements for material conformity, traceability and certification met in full

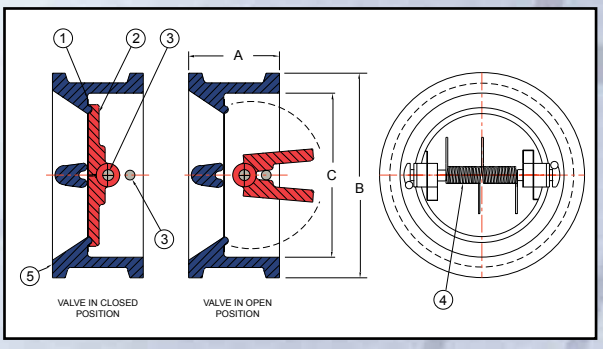


Retainerless Wafer Double Door Check Valves

CD125IS - Cast Iron

ASME Class 125 Wafer Design

The **Dual Plate Check Valve** features exceptional flow characteristics. The compact wafer style body is a one piece, retainerless model which eliminates potential leak paths. The dual discs are designed to provide maximum strength with minimum opening time. The full contact seats maintain positive shut-off at minimum working pressure. Torsion springs assist in positive shut-off and disc closure, preventing backflow. The two heavy duty, corrosion resistant shafts act as stops to prevent over-travel of the discs. Thrust washers reduce friction and wear of the valve disc hinges.



Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Construction		
Item	Description	Material
1	Seat / Seal	Buna-N
2	Discs	A351 Gr. CF8M Stainless Steel
3	Shaft	A351 Gr. CF8M Stainless Steel
4	Torsion Spring	A351 Gr. CF8M Stainless Steel
5	Cast Body	A126 Class B Cast Iron

Dimensions (Inches)						
Size		A	B	C	Cv	Shipping Weight (LBS)
Inches	Prefix					
2	0200	2 1/8	4 1/8	2 3/8	48	6
2 1/2	0250	2 1/8	4 7/8	2 5/16	100	7
3	0300	2 1/4	5 3/8	3 3/4	181	10
4	0400	2 1/2	6 3/8	4 1/2	291	14
5	0500	2 3/4	7 11/16	5 11/16	494	19
6	0600	3	8 3/4	6 5/8	705	25
8	0800	3 3/4	11	8 5/8	1,795	42
10	1000	4 1/4	13 3/8	10 3/4	2,563	72
12	1200	5 5/8	16	12 5/8	4,259	116
14	1400	7 1/4	16 5/8	13 11/16	5,436	182
16	1600	7 1/2	20 1/8	16 11/16	7,355	243
18	1800	8	21 5/8	18	9,537	334
20	2000	8 3/8	23 7/8	20 1/4	12,004	430
24	2400	8 3/4	28 1/4	23 3/4	17,804	582
26	2600	11 1/4	30 1/2	24 3/4	30,000	1,128
28	2800	12 5/8	32 3/4	27 5/8	33,600	1,293
30	3000	12	34 13/16	30 1/8	38,400	1,356
32	3200	14 1/2	37	30 11/16	48,000	1,746
36	3600	14 1/2	41 1/4	34	55,200	2,125
40	4000	16	45 3/4	38 13/16	84,000	3,011
42	4200	17	48	41 13/16	96,000	3,795
48	4800	20 5/8	54 1/2	47	117,600	5,566
54	5400	21 1/4	60 7/8	50 1/2	141,300	6,831

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CD125IS**

4" Wafer Check Valve, Cast Iron, 316 Stainless Steel Discs, Buna-N Seat

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CD125IS	2" - 12"	200 @ 150 °F
	14" - 54"	150 @ 150 °F

Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

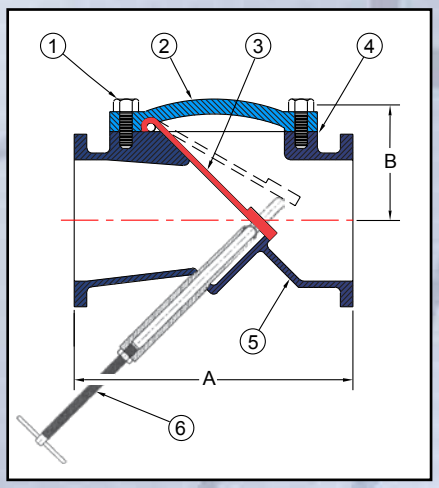
Elastic Swing Check Valves

CXF125IV - Ductile Iron

ASME Class 125 Flanged End Connections

The **Elastic Swing Check Valve** is suitable for municipal and industrial applications. It is standard with a ductile iron body with ASME Class 125 flanges. The internal body is epoxy coated. The one-piece molded disc has a steel reinforced insert to ensure closure. Plus, while in the open position, it will allow 100% uninterrupted flow. The one-piece disc hinge and disc can be repaired without removal of the valve from the line.

Optional: A Backflow Rod can be installed and used for draining or pump priming. This option is a safe and effective way to manually activate the valve.



Construction		
Item	Description	Material
1	Cover Bolts	Alloy Steel SAE Grade 5
2	Cover	A536 60-45-12 Ductile Iron
3	Disc	Buna-N with Steel & Fabric Reinforcement
4	Gasket	Lexide NK-511 (non-asbestos)
5	Cast Body	A536 60-45-12 Ductile Iron
6	Backflow Rod (Optional)	A582, B505 Brass

Notes:

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Dimensions (Inches)						
Size		A	B	Drain Size	Cv	Shipping Weight (LBS)
Inches	Prefix					
2	0200	8	3 3/8	3/4	95	30
2 1/2	0250	8 1/2	3 3/8	3/4	155	38
3	0300	9 1/2	3 7/8	3/4	225	46
4	0400	11 1/2	4 5/8	1	440	70
5	0500	13 3/4	5 1/8	1	722	105
6	0600	15	5 7/8	1 1/4	1,040	115
8	0800	19 1/2	7 5/8	1 1/2	1,900	250
10	1000	24 1/2	9 7/8	2 1/2	3,050	525
12	1200	27 1/2	11 1/2	2 1/2	4,600	710
14	1400	31	13 1/2	2 1/2	6,600	860
16	1600	31 15/16	15 1/4	2 1/2	8,700	1,090
18	1800	35 15/16	17 1/4	3	11,200	1,450
20	2000	39 15/16	19 1/4	3	14,200	1,720
24	2400	47 15/16	22 3/4	3	21,000	2,600

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CXF125IV**

4" Flanged Elastic Swing Check Valve, Ductile Iron, Buna-N Disc with Steel and Fabric Reinforcement.

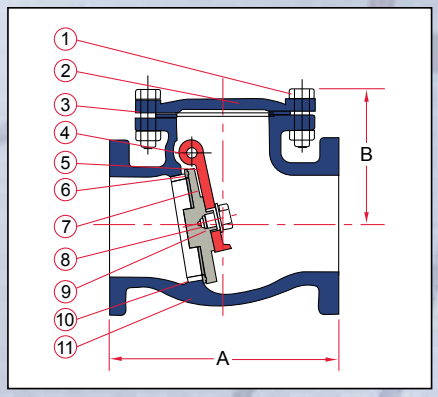
Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CXF125IV	2" - 12"	200 @ 150 °F
	14" - 24"	150 @ 150 °F

Horizontal Swing Check Valves

CSF125IB - Cast Iron

ASME Class 125 Flanged End Connections

The Sure Flow **Horizontal Swing Check Valve** has a cast iron body, cover and disc. The valve is provided with a bronze seat ring and bronze disc ring. Bronze, being softer than a cast iron facing, offers a more positive sealing effect than competitors' standard iron facing. Furthermore, a bronze seat ring and bronze disc ring are used to ensure greater versatility and to withstand greater temperature and fluid variations.



Construction		
Item	Description	Material
1	Cover Bolting	Steel
2	Cover	A126 Class B
3	Gasket	Graphite
4	Hanger Pin	Stainless Steel
5	Hanger	A126 Class B
6	Disc Ring	B62
7	Disc	A126 Class B
8	Disc Washer	Steel
9	Disc Bolt	Steel
10	Seat Ring	B62
11	Cast Body	A126 Class B

Notes:

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Dimensions (Inches)				
Size		A	B	Shipping Weight (LBS)
Inches	Prefix			
2	0200	8	5 1/8	32
2 1/2	0250	8 1/2	5 5/8	44
3	0300	9 1/2	6 1/8	57
4	0400	11 1/2	7 1/8	96
5	0500	13	9	134
6	0600	14	9 1/4	165
8	0800	19 1/2	10 7/8	299
10	1000	24 1/2	12 1/4	572
12	1200	27 1/2	13 3/4	858
14	1400	31	18 1/4	1032
16	1600	30 1/4	19 1/2	1326
18	1800	33	21	1695
20	2000	36	23 1/2	3289

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CSF125IB**

4" Flanged Horizontal Swing Check Valve, Cast Iron, Bronze Seat Ring

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CSF125IB	2" - 12"	200 @ 150 °F
	14" - 20"	150 @ 150 °F

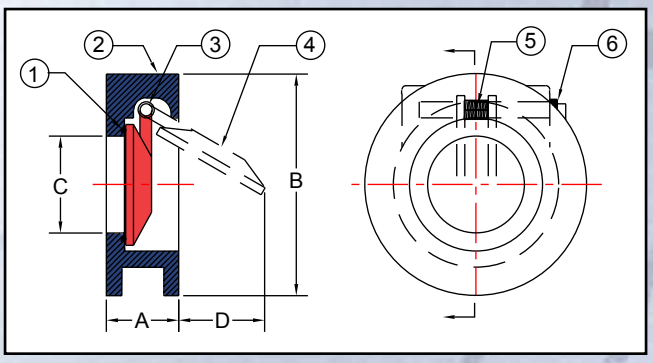
Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Wafer Swing Check Valves

CSW125IS - Cast Iron

ASME Class 125 Wafer Swing Disc Design



The **Wafer Swing Check Valve** incorporates several features distinguishing it from conventional check valves for silent, fast, non-slam operation. The most prominent of these is the accurately machined disc and its special quick closing action. Spring loading of the 316 Stainless Steel disc assures instantaneous closure to reversing flow, preventing build-up of momentum, which is the cause of damaging water hammer. The hinge pin design assures free movement of the disc and eliminates seizure under extreme conditions. A Buna-N soft seat insert on the CSW125IS is standard for positive sealing of hard-to-hold solvents and fluids. A lifting eye hook is standard on 8" to 16" valves.

Construction		
Item	Description	Material
1	O-Ring Seal	Buna-N
2	Cast Body	ASTM A126 Class B
3	Shaft	316 Stainless Steel
4	Disc	316 Stainless Steel
5	Torsion Spring	316 Stainless Steel
6	Plug	ASTM A126 Class B

Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Dimensions (Inches)							
Size		A	B	C	D	Cv	Shipping Weight (LBS)
Inches	Prefix						
2	0200	2 1/4	4 1/8	1 1/2	7/8	70	10
2 1/2	0250	2 3/8	4 7/8	1 3/4	1	190	12
3	0300	2 5/8	5 3/8	2 1/8	1 1/2	225	17
4	0400	2 1/4	6 7/8	3 1/8	2 1/4	295	26
5	0500	2 1/2	7 3/4	3 7/8	2 1/2	430	36
6	0600	2 3/4	8 3/4	4 3/4	2 3/4	700	53
8	0800	2 7/8	11	6 1/2	4	1,270	72
10	1000	3 1/8	13 3/8	7 3/4	7 3/16	2,350	115
12	1200	3 3/8	16 1/8	9 1/2	9	3,850	140
14	1400	4 1/4	17 5/8	10 1/8	9 3/4	4,250	170
16	1600	4 1/4	20 1/4	11 1/4	12	7,000	200

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CSW125IS**

4" Wafer Swing Check Valve, Cast Iron, 316 Stainless Steel Disc, Buna-N Seat

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CSW125IS	2" - 12"	200 @ 150 °F
	14" - 16"	150 @ 150 °F

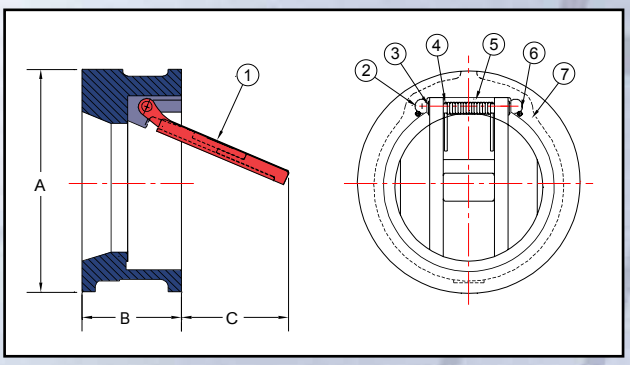
Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Wafer Swing Check Valves

CSW150SSMIR - Cast Stainless Steel

ASME Class 150 Wafer Swing Disc Design



The **Wafer Swing Check Valve** incorporates several features distinguishing it from conventional check valves for silent, fast, non-slam operation. The most prominent of these is the accurately machined disc and its special quick closing action. Spring loading of the 316 Stainless Steel disc assures instantaneous closure to reversing flow, preventing build-up of momentum, which is the cause of damaging water hammer. The hinge pin design assures free movement of the disc and eliminates seizure under extreme conditions. Integral metal seat is standard for sealing. A lifting eye hook is standard on 8" to 14" valves.

Construction		
Item	Description	Material
1	Disc	A351 Gr. CF8M
2	Set Bolt	316 Stainless Steel
3	Washer	316 Stainless Steel
4	Guide	316 Stainless Steel
5	Torsion Spring	316 Stainless Steel
6	Insert	A351 Gr. CF8M
7	Cast Body	A351 Gr. CF8M

Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Dimensions (Inches)						
Size		A	B	C	Cv	Shipping Weight (LBS)
Inches	Prefix					
2	0200	4 1/8	2 3/8	1 1/8	70	8
3	0300	5 3/8	2 7/8	1 1/2	225	16
4	0400	6 7/8	2 7/8	2 3/8	295	26
6	0600	8 3/4	3 7/8	3 3/4	700	55
8	0800	11	5	4	1,270	103
10	1000	13 3/8	5 3/4	5 7/16	2,350	143
12	1200	16 1/8	7 1/8	5 7/8	3,850	252
14	1400	17 3/4	7 1/4	7	4,250	294

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CSW150SSMIR**

4" Wafer Swing Check Valve, Cast Stainless Steel, 316 Stainless Steel Disc, Metal Seat

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CSW150SSMIR	2" - 14"	275 @ 100 °F

Sure Flow Equipment Inc.

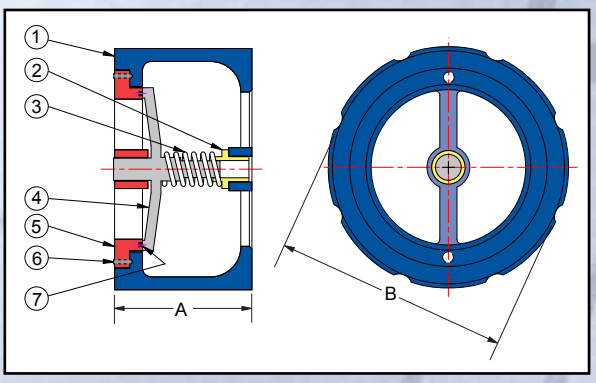
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Silent Wafer Check Valves

CW125ISC - Cast Iron

ASME Class 125 Wafer Design

Sure Flow Wafer Check Valves are designed to close before the pump stops completely. This prevents flow reversal which eliminates water hammer and system surges associated with valve closure. They feature quiet operation, a guided disc and can be installed in the vertical or horizontal position. The CW125ISC Wafer Check Valves are offered in sizes ranging from 2" to 12".



Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.
- * 12" size has special full lug pattern.
- Consult factory for optional construction materials and installation instructions. Optional resilient seating of Buna-N or Viton available for 6" size and larger.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Construction		
Item	Description	Material
1	Cast Body	A126 Class B
2	Bushing	Stainless Steel
3	Spring	Stainless Steel
4	Disc	A351 Gr. CF8M
5	Seat	A351 Gr. CF8M
6	Screw	Stainless Steel
7	(Optional) Quad Ring	Buna-N

Dimensions (Inches)					
Size		A	B	Cv	Shipping Weight (LBS)
Inches	Prefix				
2	0200	2 5/8	4	60	7
2 1/2	0250	2 7/8	4 3/4	88	9
3	0300	3 1/8	5 1/4	125	15
4	0400	4	6 3/4	215	25
5	0500	4 5/8	7 5/8	340	32
6	0600	5 1/2	8 5/8	410	56
8	0800	6 1/2	10 3/4	720	100
10	1000	8 1/4	13 1/8	1,200	140
*12	1200	11 1/4	19	1,700	370

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0250	**CW125ISC**

2 1/2" Flat Face Wafer Silent Check Valve, Cast Iron, 316 Stainless Steel Disc.

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CW125ISC	2" - 12"	200 @ 150 °F

Sure Flow Equipment Inc.

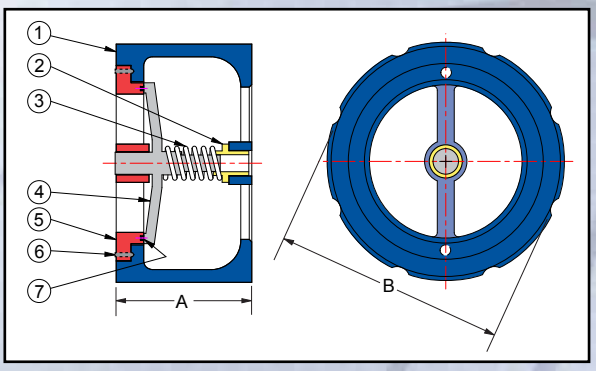
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Silent Wafer Check Valves

CW150C - Cast Steel
CW150SS - Cast Stainless Steel

ASME Class 150 Wafer Design

Sure Flow Wafer Check Valves are designed to close before the pump stops completely. This prevents flow reversal which eliminates water hammer and system surges associated with valve closure. They feature quiet operation, a guided disc and can be installed in the vertical or horizontal position. The CW150C and CW150SS Wafer Check Valves are offered in sizes ranging from 2" to 12".



Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.
- * 12" size has special full lug pattern.
- Consult factory for optional construction materials and installation instructions. Optional resilient seating of Buna-N or Viton available for 6" size and larger.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Construction		
Item	Description	Material
1	Cast Body - Carbon	A216 Gr. WCB
	Cast Body - Stainless	A351 Gr. CF8M
2	Bushing	Stainless Steel
3	Spring	Stainless Steel
4	Disc	A351 Gr. CF8M
5	Seat	A351 Gr. CF8M
6	Screw	Stainless Steel
7	(Optional) Quad Ring	Buna-N

Dimensions (Inches)					
Size		A	B	Cv	Shipping Weight (LBS)
Inches	Prefix				
2	0200	2 5/8	4	60	7
2 1/2	0250	2 7/8	4 3/4	88	9
3	0300	3 1/8	5 1/4	125	15
4	0400	4	6 3/4	215	25
5	0500	4 5/8	7 5/8	340	32
6	0600	5 1/2	8 5/8	410	56
8	0800	6 1/2	10 3/4	720	100
10	1000	8 1/4	13 1/8	1,200	140
*12	1200	11 1/4	19	1,700	370

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0800	**CW150SS**

8" Raised Face Wafer Silent Check Valve, Cast Stainless Steel, 316 Stainless Steel Disc.

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CW150C	2" - 12"	285 @ 100 °F
CW150SS	2" - 12"	275 @ 100 °F

Sure Flow Equipment Inc.

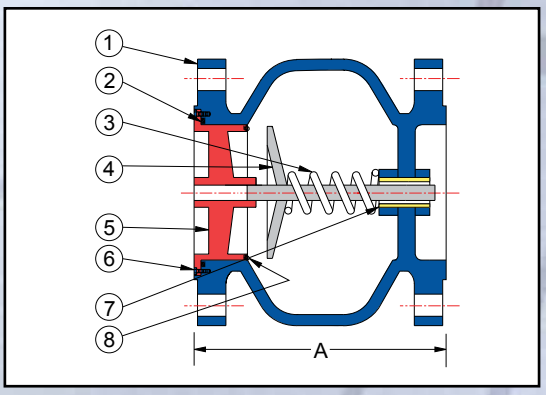
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Silent Globe Check Valves

CF125ISC - Cast Iron

ASME Class 125 Flanged End Connections

Sure Flow Globe Check Valves are designed to close before the pump stops completely. This prevents flow reversal which eliminates water hammer and system surges associated with valve closure. They feature quiet operation, a guided disc and can be installed in the vertical or horizontal position. The CF125ISC is offered in sizes ranging from 2" to 24".



Construction		
Item	Description	Material
1	Cast Body	A126 Class B
2	O-Ring	Buna-N
3	Spring	Stainless Steel
4	Disc	Stainless Steel
5	Seat	Stainless Steel
6	Screw	Stainless Steel
7	Bushing	Stainless Steel
8	(Optional) Quad Ring	Buna-N

Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.
- Consult factory for optional construction materials and installation instructions. Optional resilient seating of Buna-N or Viton Quad Ring available for 6" size and larger.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Dimensions (Inches)				
Size		A	Cv	Shipping Weight (LBS)
Inches	Prefix			
2	0200	6 1/4	70	30
2 1/2	0250	7	105	34
3	0300	7 1/2	147	50
4	0400	8 1/2	265	75
5	0500	9 1/2	430	100
6	0600	10 1/2	605	130
8	0800	13 1/2	1,105	240
10	1000	16 1/4	1,700	360
12	1200	20 1/4	2,575	600
14	1400	22 3/4	3,350	710
16	1600	24 3/4	4,300	810
18	1800	22 1/2	5,593	910
20	2000	24	7,093	1,140
24	2400	24	10,562	2,600

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CF125ISC**

4" Flat Face Flanged Silent Check Valve, Cast Iron, 316 Stainless Steel Disc.

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CF125ISC	2" - 12"	200 @ 150 °F
	14" - 24"	150 @ 150 °F

Sure Flow Equipment Inc.

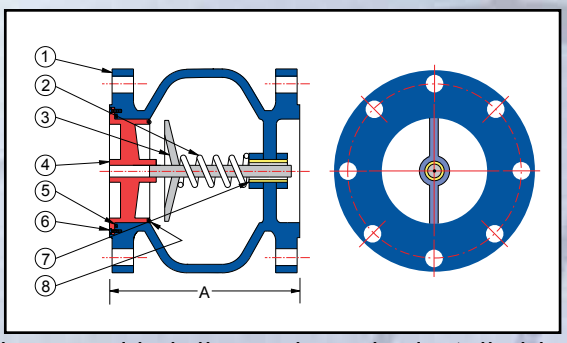
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Silent Globe Check Valves

CF150C - Cast Steel
CF150SSC - Cast Stainless Steel

ASME Class 150 Flanged End Connections

Sure Flow Globe Check Valves are designed to close before the pump stops completely. This prevents flow reversal which eliminates water hammer and system surges associated with valve closure.



They feature quiet operation, a guided disc and can be installed in the vertical or horizontal position. The CF150C and CF150SSC are offered in sizes ranging from 2" to 12".

Notes:

- It is recommended that valves be installed 7 to 10 pipe lengths away from the turbulence.
- Consult factory for optional construction materials and installation instructions. Optional resilient seating of Buna-N or Viton available for 6" size and larger.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Construction		
Item	Description	Material
1	Cast Body - Carbon	A216 Gr. WCB
	Cast Body - Stainless	A351 Gr. CF8M
2	Spring	Stainless Steel
3	Disc	Stainless Steel
4	Seat	Stainless Steel
5	O-Ring	Buna-N
6	Screw	Stainless Steel
7	Bushing	Stainless Steel
8	(Optional) Quad Ring	Buna-N

Dimensions (Inches)				
Size		A	Cv	Shipping Weight (LBS)
Inches	Prefix			
2	0200	6 1/4	70	14
2 1/2	0250	7	105	20
3	0300	7 5/8	147	25
4	0400	8 1/2	265	41
6	0600	10 1/2	605	67
8	0800	12	1,105	129
10	1000	14	1,700	197
12	1200	18	2,575	321

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**CF150C**

4" Raised Face Flanged Silent Check Valve, Cast Steel, 316 Stainless Steel Disc.

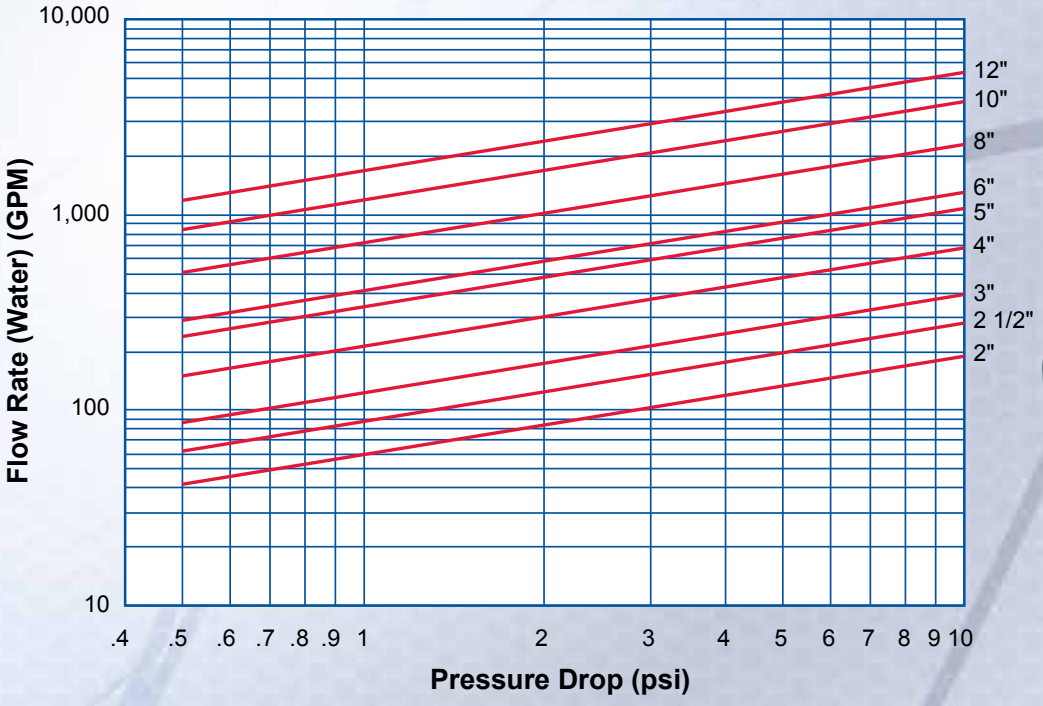
Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
CF150C	2" - 12"	285 @ 100 °F
CF150SSC	2" - 12"	275 @ 100 °F

Sure Flow Equipment Inc.

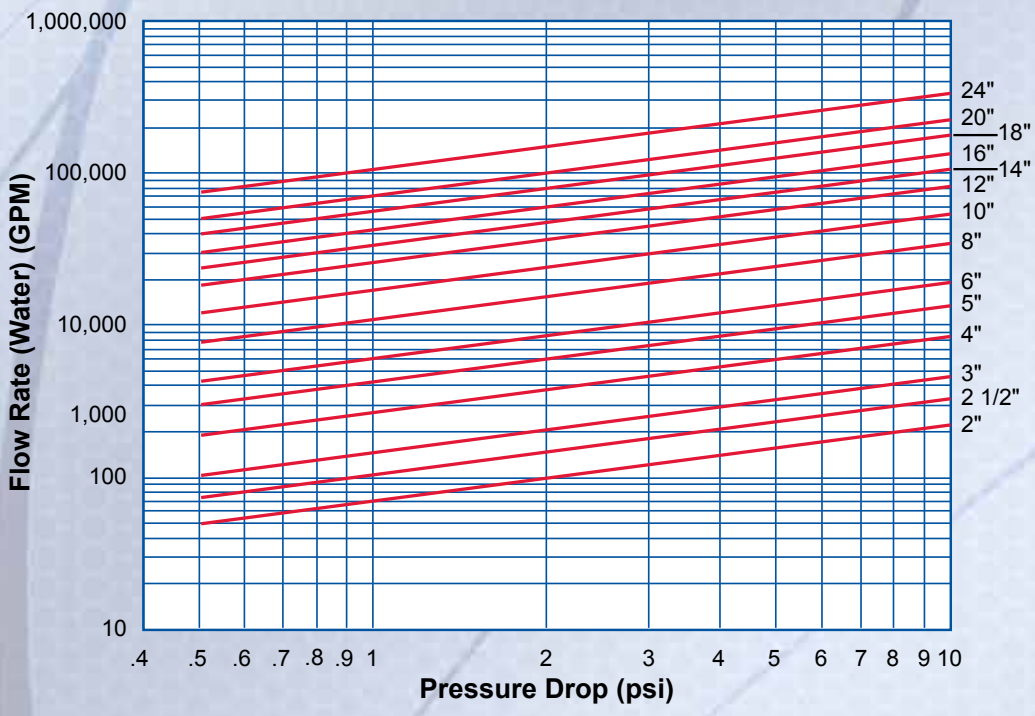
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Silent Check Valves - Pressure Drop

Flow Rate Vs. Pressure Drop - CW Series Wafer Check Valves



Flow Rate Vs. Pressure Drop - CF Series Globe Check Valves



Notes:

- The above curves are based on the flow of clean water at ambient temperature.
- Preferred piping standards recommend placing check valves 7 to 10 pipe diameters from any turbulence producing device, i.e. pumps, elbows, etc.
- Maximum recommended flow velocity of 10 ft/sec.
- These charts are for theoretical calculations ONLY. Please contact our office with your exact specifications and you will be provided with factory calculations.

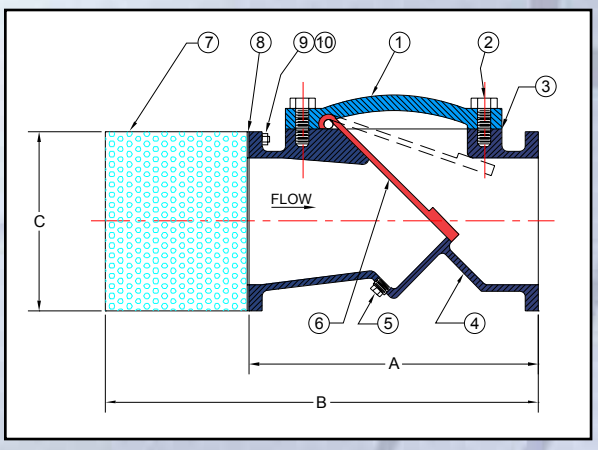
Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Elastic Swing Foot Valves

FVCEXF125 - Ductile Iron

ASME Class 125 Flanged End Connections



The **Elastic Swing Foot Valve** is standard with a ductile iron body, ASME Class 125 flanges and is suitable for municipal and industrial applications. The internal body is epoxy coated. Special coatings are available upon request. The one-piece molded disc has a steel reinforced insert to ensure closure, but while in the open position will allow 100% uninterrupted flow. The one-piece disc hinge and flapper can be repaired without removal of the valve from the line. The Elastic Swing Foot Valve is designed for continuous flow applications and is not recommended for reciprocating pumps. The Elastic Swing Foot Valve can be installed in a vertical or horizontal pipeline.

Notes:

- Valve comes standard with 1/8" perf. Stainless Steel Screen. Options are available.
- ***Horizontal Flow:*** Valve must be installed with cover on top to ensure proper operation.

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Construction										
Item	1	2	3	4	5	6	7	8	9	10
Description	Cover	Cover Bolts	Gasket	Cast Body	Drain	Disc	Screen Assembly	Plate Flange	Studs	Nuts

Dimensions (Inches)							
Size		A	B	C	Drain Size	Cv	Shipping Weight (LBS)
Inches	Prefix						
2	0200	8	10 1/2	6 1/4	3/4	76	36
2 1/2	0250	8 1/2	11	7 1/4	3/4	124	46
3	0300	9 1/2	12	7 3/4	3/4	180	55
4	0400	11 1/2	14	9 1/4	1	352	84
5	0500	13 3/4	16 3/4	10 1/4	1	578	120
6	0600	15	19 1/2	11 1/4	1 1/4	832	138
8	0800	19 1/2	25	13 3/4	1 1/2	1,520	300
10	1000	24 1/2	31	16 1/4	2 1/2	2,440	630
12	1200	27 1/2	35	19 1/4	2 1/2	3,680	852
14	1400	31	39 1/2	21 1/4	2 1/2	5,280	1,032
16	1600	31 15/16	41 7/16	23 3/4	2 1/2	6,960	1,308
18	1800	35 15/16	47 7/16	25 1/4	3	8,960	1,740
20	2000	39 15/16	55 7/16	27 3/4	3	11,360	1,890
24	2400	47 15/16	65 7/16	32 1/4	3	16,800	3,120

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
0400	**FVCEXF125**

4" Flanged Elastic Swing Foot Valve, Ductile Iron, Buna-N Disc with Steel and Fabric Reinforcement.

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
FVCEXF125	2" - 12"	200 @ 150 °F
	14" - 24"	150 @ 150 °F

Sure Flow Equipment Inc.

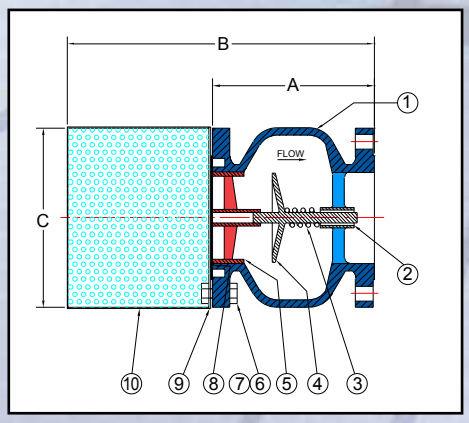
Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Silent Seat Foot Valves

FV125 - Cast Iron
FV150 / FV150SS - Cast Steel / Cast Stainless Steel

ASME Flanged End Connections

The **Sure Flow Globe Silent Seat Foot Valve** has low head loss through its full ported body area and heavy duty stainless steel basket screening. As pressure increases, the Buna-N Quad Ring is compressed slightly and the disc makes contact with the metal portion of the valve seat, preventing any further compression of the ring. The Buna-N Quad Ring will continue to provide "drop-tight seating" during the higher pressure ranges without damage from the increased pressure loading. A foot valve should be used with basket strainers and check valves.



Standard Features

- The seating design provides positive shut-off at all pressure ranges without additional loading on the seal.
- A Buna-N Quad Ring is standard on Foot Valves size 6" and larger.
- Valve comes standard with 1/8" perf. Stainless Steel Screen. Options are available.
- Heavy duty stainless steel screening, with flow area 3 to 4 times that of pipe area.
- Silent operation, by design of disc, stroke and linear closing characteristics.

Notes:

Manufacturer reserves the right to modify dimensions, materials, or design. Consult factory for certification.

Construction										
Item	1	2	3	4	5	6	7	8	9	10
Description	Body	Bushing	Spring	Disc	Quad Ring	Studs	Nuts	O-Ring	Plate Flange	Screen Assembly

Dimensions (Inches)										
Size		A		B		C		Cv	Shipping Weight (LBS)	
Inches	Prefix	125	150	125	150	125	150		125	150
2	0200	6 1/4	6 1/4	9 1/4	9 1/4	6 1/4	6 1/4	50	31	24
2 1/2	0250	7	7	10	10	7 1/4	7 1/4	84	46	34
3	0300	7 1/2	7 5/8	10 5/8	10 3/4	7 3/4	7 3/4	118	53	45
4	0400	8 1/2	8 1/2	11 1/2	11 1/2	9 1/4	9 1/4	212	88	70
5	0500	9 1/2	-	13 1/2	-	10 1/8	-	344	123	-
6	0600	10 1/2	10 1/2	15 1/2	15 1/2	11 1/4	11 1/4	484	153	114
8	0800	13 1/2	12	18	16 1/2	13 3/4	13 3/4	884	272	216
10	1000	16 1/4	14	21	18 3/4	16 1/4	16 1/4	1,360	425	340
12	1200	20 1/4	18	26	23 3/4	19 1/4	19 1/4	2,060	716	577
14	1400	22 3/4	-	31 1/4	-	21 1/4	-	2,680	1,138	-
16	1600	24 3/4	-	34 1/4	-	23 3/4	-	3,440	1,420	-
18	1800	22 1/2	-	34	-	25 1/4	-	4,475	1,590	-
20	2000	24	-	39 1/2	-	27 3/4	-	5,675	1,989	-
24	2400	24	-	41 1/2	-	32 1/4	-	8,450	4,480	-

Ordering Information

Example: Include full description

Size (Prefix)	Model Number
1200	**FV125**

12" Silent Seat Flanged Foot Valve, Cast Iron, Buna-N seat.

Operating Pressures and Temperatures		
Type	Size	psi @ Temp WOG
FV125	2" - 12"	200 @ 150 °F
	14" - 24"	150 @ 150 °F
FV150	2" - 12"	285 @ 100 °F
FV150SS	2" - 12"	275 @ 100 °F

Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

Sure Flow Custom Engineered Strainers

Another Group of
"Handsome" Sure Flow Employees

Sure Flow Custom Engineered
Basket Strainers

Venezuela's Monel
Custom Strainer Basket

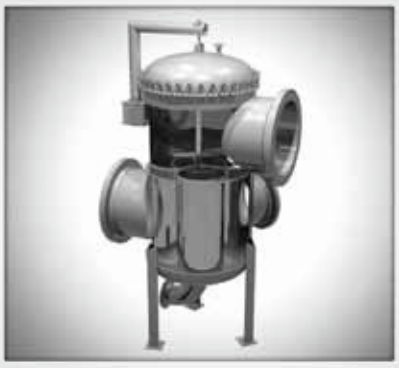
ASME "U" Stamp
Basket Strainers

Hanging Out

High Capacity
Forged Tee Strainers

Creative Custom Fabrication

Rubber Lined "Giant"
Basket Strainer



South America:
"The Big Guys" Basket Strainer

A Sampling of our "Team" Accomplishments

Sure Flow Equipment Inc.

Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164
International: 1-905-335-1350 International Fax: 1-905-332-4993
Email: info@sureflowequipment.com www.sureflowequipment.com

www.sureflowequipment.com

Sure Flow Equipment Inc. – Limited Warranty

All products are warranted to be free of defects in material and workmanship for a period of one year from the date of shipment, subject to below. **All custom products are not subject to return, credit or refund.**

If the purchaser believes a product to be defective, the purchaser shall:

(a) Notify the manufacturer **within ten(10) days after receipt of merchandise**, state the alleged defect and request permission to return the product. Merchandise will not be accepted for return without a "Return Code" clearly marked on the outside of the package. Contact the office to obtain a return code. **Merchandise will not be accepted for return or credit later than six (6) months after invoicing.**

(b) If permission is given, return the product with the transportation prepaid. Collect shipments will not be accepted. Goods must be returned **prepaid**.

If a shipment is received in a damaged or deficient condition, a claim must be filed with the delivering carrier and noted on the freight bill before you accept the merchandise. All other claims must be made in writing and received by Sure Flow Equipment Inc. within ten (10) days after receipt of merchandise.

If the product is accepted for return and found to be defective, the manufacturer will, at its discretion, either repair or replace the product, F.O.B. factory, within 60 days of receipt, or issue credit for the purchase price.

Sure Flow Equipment Inc. shall not be liable for failure to deliver or delays in delivering occasioned by acts of God, war, labor difficulties, inability to obtain materials or any other causes whatsoever beyond our control.

Other than to repair, replace or credit as described above, purchaser agrees that manufacturer shall not be liable for any loss, costs, expenses, or damages of any kind arising out of the product, its use, installation or replacements, labeling, instructions, information or technical data of any kind, description of product use, sample or model, warnings or lack of any of the foregoing.

NO OTHER WARRANTIES, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, ARE MADE OR AUTHORIZED. NO AFFIRMATION OF ACT, PROMISE, DESCRIPTION OF PRODUCT OR USE OR SAMPLE OR MODEL SHALL CREATE ANY WARRANTY FROM MANUFACTURER, UNLESS SIGNED BY THE PRESIDENT OF MANUFACTURER.

CANCELLATIONS: **Cancelled orders will be subject to a charge of at least 35%. Cancelled custom orders will be subject to a charge of 100% of quoted price.**

MINIMUM BILLING: $100.00 NET

SPECIAL DOCUMENTATION: **A charge will apply for non-standard, special documentation requests such as Material Test Reports (MTR's) and Certificates of Conformance (COC's).**

Product shipping weights are approximate and subject to variances depending on packaging methods/requirements.

5010 North Service Rd.
Burlington, ON L7L 5R5
Tel: 905-335-1350 Fax: 905-332-4993

P.O. Box 321
Tonawanda, NY 14151-0321
Tel: 1-800-263-8251 Toll Free Fax: 1-800-876-1164

Email: info@sureflowequipment.com
Web Site: www.sureflowequipment.com

February 2023