



# General Data

Advanced manufacturing techniques and equipment, a continuing program of engineering research and product development, skilled craftsman, and over twelve decades of experience in flow control are behind the quality and dependability built into every Jenkins product.

This catalog presents some of these products, namely: Jenkins line of industrial iron gate, globe and check valves. The information is presented in a comprehensive manner and includes material, construction, rating, principal dimension, and weight data.

## Hydrostatic and Shock Working Pressures

Jenkins valves are suitable for liquid working pressures specified on catalog pages only when used in hydraulic installations in which shock is absent or negligible. The sudden closure of a valve in a hydraulic system causes the body of liquid, which may be moving at a rate generally in excess of one foot per second, to stop instantaneously. As liquids are relatively incompressible, the sudden cessation of flow effects a rise in pressure considerably greater than the static working pressure. This pressure increase is termed "SHOCK" and may, in some cases, be sufficient to cause valves or piping to fail.

Pressure increase due to shock is not dependent upon the working pressure in the system but upon the velocity at which the liquid is flowing. This pressure surge, or shock, severely limits design velocities...a fact readily understandable if it is remembered that pressure rise resulting from arrest of flow may be as high as 60 psi for each foot per second initial velocity. For example, installations of 100 psi and 1000 psi working pressures, with the same initial velocity of 10 feet per second, will be subject to the same increase in pressure (approximately 600 psi) due to instantaneous closure of a valve.

Shock generally prevails in lines equipped with check or quick-closing valves, or in lines supplied by reciprocating pumps. It may also be produced, to a lesser degree, by rapid closure of gate and globe valves. Therefore, care should be exercised when closing valves installed in liquid lines.

Where shock is likely to occur, the maximum shock pressure should be added to the working pressure of the line to determine working pressure of products in the line...also, hydraulic installations should be equipped with air chambers or other types of shock absorbers to eliminate, as much as possible, increase in pressure due to shock.

## Testing

Iron valves described in this section meet or exceed the MSS SP-82, MSS SP-70, MSS SP-71 and MSS SP-85 specifications for testing.

## Materials

The selection of materials for components of Jenkins valves is based upon expert metallurgical, engineering, foundry and fabrication knowledge as well as on many years of usage experience. Considerations affecting materials of parts which come in contact with the conveyed fluid include pressure, temperature and chemical composition of the fluid. The materials of moving parts that are subject to rubbing contact are selected on the basis of their resistance to wear, corrosion, seizing or galling, and on their frictional characteristics.

Utilization of materials to their full capability is assured by the use of stress analysis techniques that include extensive laboratory testing as well as the application of analytical theory. Stress levels for all materials used are maintained within the levels established by applicable codes, standards and specifications.

## Metrication

This catalogue shows equivalent metric values to the customary imperial units. The "soft" conversion was arrived at by following MSS SP-86 guidelines.

## Illustrations , Weights and Material & Designs

**Illustrations** – Catalogue illustrations are intended to show the basic concept only and are representative of a certain size of each line of product, not necessarily all sizes in all details.

**Material & Design** – We reserve the right to institute changes in materials, designs, dimensions and specifications without notice in keeping with our policy of continuing product development.

**Weights** – shown are approximate and are not guaranteed. They represent the average weight of Jenkins 'Valves' products as made from patterns in use at time weights were compiled.



# Jenkins Iron Alloys

## Cast Iron

Used primarily for valve pressure retaining parts.  
Recommended to 450 °F (232 °C).

### ASTM A126, Class B

#### Chemical Requirements

|                  | Minimum | Maximum |
|------------------|---------|---------|
| Sulphur .....    | –       | 0.15    |
| Phosphorus ..... | –       | 0.75    |

#### Tensile Requirements

|                           | Minimum | Maximum |
|---------------------------|---------|---------|
| Tensile Strength, psi     | 31,000  | –       |
| Transverse Strength, lbs. | 3,300   | –       |
| Deflection @ Center, in.  | 0.12    | –       |

## 3% Nickel Iron

Tensile strength comparable to ASTM A126, Class B, but is used for corrosive service where ordinary grey iron is not adequate. Castings are marked “3Ni”.

#### Chemical Requirements

|                  | Minimum | Maximum |
|------------------|---------|---------|
| Nickel .....     | 2.75    | 3.25    |
| Sulphur .....    | –       | 0.12    |
| Phosphorus ..... | –       | 0.40    |

#### Tensile Requirements

|                           | Minimum | Maximum |
|---------------------------|---------|---------|
| Tensile Strength, psi     | 31,000  | –       |
| Transverse Strength, lbs. | 3,300   | –       |
| Deflection @ Center, in.  | 0.12    | –       |

## NI-Resist Iron

A copper-free alloy used where physical properties of cast iron suffice but where greater corrosion resistance is required. Castings are marked “2NR.”

Ni-Resist is a registered trademark of the International Nickel Company, Inc.

### ASTM A436, Type 2

#### Chemical Requirements

|                 | Minimum   | Maximum |
|-----------------|-----------|---------|
| Carbon .....    | –         | 3.00    |
| Manganese ..... | 0.50      | 1.50    |
| Sulphur .....   | –         | 0.12    |
| Silicon .....   | 1.00      | 2.80    |
| Chromium .....  | 1.50      | 2.50    |
| Nickel .....    | 18.00     | 22.00   |
| Copper .....    | –         | 0.50    |
| Iron .....      | remainder |         |

#### Tensile Requirements

|                            | Minimum | Maximum |
|----------------------------|---------|---------|
| Tensile Strength, psi      | 25,000  | –       |
| Brinell Hardness (3000 Kg) | 118     | 174     |

## Malleable Iron

Used for valves subjected to expansion and contraction stresses and shock.

### ASTM A338. Supplementary: ASTM A47, Grade 32510

#### Tensile Requirements

|                           | Minimum | Maximum |
|---------------------------|---------|---------|
| Tensile Strength, psi     | 50,000  | –       |
| Yield Point, psi          | 32,500  | –       |
| elongation in 2 inches, % | 10      | –       |



# Iron Valve Ratings

## Introduction to Rating

The pressure-temperature ratings shown below apply to class 125 and 250 iron valves covered in this catalogue.

A. Ratings for Class 125 and 250 iron valves are indicated on the relevant catalog page in this manner:

... PSI Steam, Basic Rating: i.e.: is the nominal steam rated pressure of the valve.

...Cold Working Pressure: where "Cold Working Pressure" is the maximum rated pressure of the valve at a temperature up to 150 °F (65 °C).

The full range of allowable pressure and temperature is determined by referring to the main pressure-temperature chart below.

B. Ratings for iron valves falling outside Class 125 and 250 are indicated in various ways on the relevant catalog page.

All ratings represent the maximum allowable non-shock pressure at the indicated temperature. If the temperature is different from indicated, the allowable pressure may be interpolated.

The operating temperature of the valve is considered as the temperature of the media flowing through it. This temperature must not exceed the maximum allowable temperature as stated in the pressure-temperature chart below.

## Pressure-Temperature Ratings

### Jenkins Cast Iron Gate, Globe, Angle and Check Valves

| Imperial Units |               |             |             |            |             |
|----------------|---------------|-------------|-------------|------------|-------------|
| Class          | 125           |             |             | 250        |             |
| Temp. °F       | Non-Shock-PSI |             |             |            |             |
|                | NPS 2"-12"    | NPS 14"-24" | NPS 30"-48" | NPS 2"-12" | NPS 14"-24" |
| -20 to 150     | 200           | 150         | 150         | 500        | 300         |
| 200            | 190           | 135         | 115         | 460        | 280         |
| 225            | 180           | 130         | 100         | 440        | 270         |
| 250            | 175           | 125         | 85          | 415        | 260         |
| 275            | 170           | 120         | 65          | 395        | 250         |
| 300            | 165           | 110         | 50          | 375        | 240         |
| 325            | 155           | 105         | –           | 355        | 230         |
| 350            | 150           | 100         | –           | 335        | 220         |
| 375            | 145           | –           | –           | 315        | 210         |
| 400            | 140           | –           | –           | 290        | 200         |
| 425            | 130           | –           | –           | 270        | –           |
| 450            | 125           | –           | –           | 250        | –           |

| Metric Units |               |             |             |            |             |
|--------------|---------------|-------------|-------------|------------|-------------|
| Class        | 125           |             |             | 250        |             |
| Temp. °C     | Non-Shock-kPa |             |             |            |             |
|              | NPS 2"-12"    | NPS 14"-24" | NPS 30"-48" | NPS 2"-12" | NPS 14"-24" |
| -29 to 66    | 1380          | 1030        | 1030        | 3480       | 2070        |
| 90           | 1310          | 930         | 790         | 3170       | 1930        |
| 110          | 1240          | 900         | 670         | 3030       | 1860        |
| 120          | 1210          | 860         | 570         | 2860       | 1790        |
| 140          | 1170          | 830         | 450         | 2720       | 1720        |
| 150          | 1140          | 760         | 340         | 2590       | 1650        |
| 160          | 1070          | 720         | –           | 2450       | 1590        |
| 180          | 1030          | 690         | –           | 2310       | 1520        |
| 190          | 1000          | –           | –           | 2170       | 1450        |
| 200          | 970           | –           | –           | 2000       | 1380        |
| 220          | 900           | –           | –           | 1860       | –           |
| 230          | 860           | –           | –           | 1720       | –           |

Manufacturers Standardization Society (MSS)  
Standard Practice SP-70, SP-71, SP-85

# Iron Swing Check Valve Features

Check valves permit flow in one direction only and close automatically when flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing.

Check valves require a minimum fluid velocity to hold them wide open and in a stable position.

The disc and any associated moving parts may be in a constant state of movement if the velocity pressure is not sufficient to hold the disc in a wide open and stable position. Premature wear and noisy operation or vibration can be avoided by selecting the size of the check valve on the basis of flow conditions rather than selecting the check valve according to the size of the pipeline.

In fact, properly sized check valves may often be smaller than the pipe in which they are used, necessitating the use of reducers for installation. The pressure drop will be no greater than that of a larger valve that is partially open. Valve life will be greatly extended, and the added bonus, of course, is the lower cost of the smaller valves.

Each valve in this section is classified by its pressure rating.

All valves designated as Class 125 and 250 comply with MSS SP-71 Standard Practice.

**Swing Check Valves** with straight-through body design and wide hinge support provide turbulence-free flow and accurate seating. There is no tendency for seating surfaces to gall or score because the disc meets the flat seat squarely without rubbing. When faster reaction to flow reversal is necessary, certain valves can be equipped with an outside lever and weight.

**Jenkins Iron Check Valves** have an identification tag which indicates the valve catalog number and other pertinent data. It provides easy and accurate field reference.

## Features

**Threaded Ends** in accordance with ANSI/ASME B1.20.1.

**Flanged Valves** conform to applicable requirements of ASME(ANSI) B16.10 in sizes 2" through 14" and B16.1 for Class 125 and 250 cast iron swing check valves.

**Bronze Trim Valves** are for steam, water, non-corrosive oil and gas and other fluids that do not corrode bronze.

**All Iron Valves** are for gases, oils and other fluids not corrosive to iron.

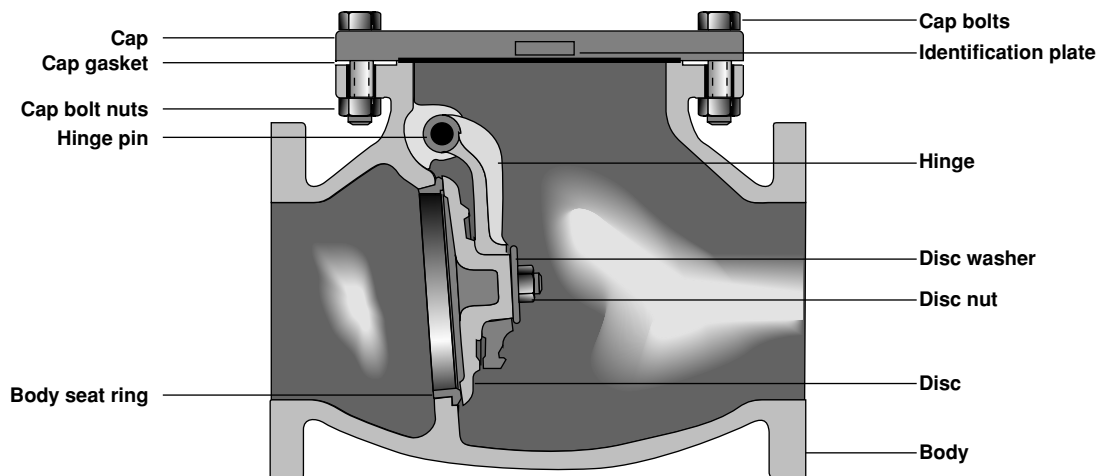
**Valves May Be Installed** in horizontal or vertical pipe lines. In vertical lines, or any angle from horizontal, they can be used for upward flow only.

**Bronze Trim Valves** - The disc is solid bronze in sizes 6" and smaller and bronze-faced in larger sizes, all have replaceable bronze seat rings. Hinge-pins are brass/stainless steel and replaceable. Hinges are solid bronze in sizes 6" and smaller and ductile iron in larger sizes.

**All-Iron Trim Valves** - The disc is solid iron with integral seat face. Body seat faces are integral with the body 8" and smaller, and, replaceable iron seat rings in larger sizes. Hinge pins are stainless steel and replaceable. Hinges are ductile iron.

**Large Bolted-On Cover** provides easy access to interior for routine maintenance.

**Non-Asbestos Gaskets and Packings.**



Swing Check Valve



# Iron Body Swing Check Valve

Figures 588J  
587J

## Class 125 • Bolted Cap • Flanged or Threaded Ends

### Figure 588J

Threaded with Bronze Trim

**Size Range:**

2 through 4 inches

### Figure 587J

Flanged with Bronze Trim

**Size Range:**

2 through 24 inches

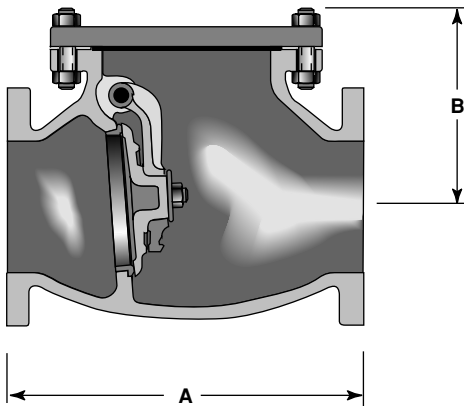
Figures 588J, 587J

**Working Pressures Non-Shock**

2"-12"

125 psi Steam, Basic Rating  
200 psi Cold Working Pressure  
14"-24"

100 psi Steam, Basic Rating  
150 psi Cold Working Pressure



### Features

- Design prohibits galling or scoring of seating surfaces because the disc meets the flat seat squarely on closing with no rubbing action
- Replaceable Bronze Seat Rings
- Bronze Hinges in 6" and smaller, ductile iron in larger sizes
- Large Bolted-on Cover
- Solid Bronze Disc 6" & smaller, Bronze Face Cast Iron on larger sizes
- Figures 587J/588J comply with MSS-SP-71 Type 1
- Figure 588J ASME(ANSI) B1.20.1
- Figure 587J ASME(ANSI) B16.1
- ASME(ANSI) B16.10 14" & smaller

For more detailed features, refer to page 20.

### Principal Parts & Materials

| Fig. No. | Size     | Stem     | Seating |
|----------|----------|----------|---------|
| 588J     | 2" - 4"  | Threaded | Bronze  |
| 587J     | 2" - 24" | Flanged  | Bronze  |

### Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

| 588J | 2                      | 2 1/2         | 3             | 4             | 587J | 2             | 2 1/2         | 3             | 4              | 5              | 6              | 8              | 10             | 12             | 14  | 16             | 18             | 20              | 24              |
|------|------------------------|---------------|---------------|---------------|------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|---|----------------|----------------|-----------------|-----------------|
|      | (50)                   | (65)          | (80)          | (100)         |      | (50)          | (65)          | (80)          | (100)          | (125)          | (150)          | (200)          | (250)          | (300)          | (350)                                     | (400)          | (450)          | (500)           | (600)           |
| A    | 6.12<br>(155)          | 7.25<br>(184) | 8.00<br>(202) | 9.25<br>(235) | A    | 8.00<br>(203) | 8.50<br>(216) | 9.50<br>(241) | 11.50<br>(292) | 13.00<br>(330) | 14.00<br>(356) | 19.50<br>(495) | 24.50<br>(622) | 27.50<br>(699) | 31.00<br>(787)                            | 36.00<br>(914) | 38.00<br>(965) | 42.00<br>(1067) | 46.00<br>(1169) |
| B    | 4.50<br>(114)          | 5.38<br>(137) | 5.88<br>(149) | 6.62<br>(168) | B    | 4.50<br>(114) | 5.38<br>(137) | 5.88<br>(149) | 6.62<br>(168)  | 7.75<br>(197)  | 8.25<br>(210)  | 10.25<br>(260) | 12.00<br>(305) | 13.75<br>(349) | 16.00<br>(486)                            | 18.00<br>(457) | 24.00<br>(610) | 27.56<br>(700)  | 31.00<br>(787)  |
| Wt.  | 18<br>(8)              | 22<br>(10)    | 29<br>(13)    | 54<br>(24)    | Wt.  | 25<br>(11)    | 34<br>(15)    | 44<br>(20)    | 75<br>(34)     | 103<br>(47)    | 127<br>(58)    | 230<br>(104)   | 510<br>(231)   | 675<br>(315)   | 960<br>(435)                              | 1450<br>(658)  | 1901<br>(864)  | 2530<br>(1149)  | 3366<br>(1529)  |
| Wt.  | Add for lever & weight |               |               |               | Wt.  | 5<br>(3)      | 6<br>(3)      | 10<br>(5)     | 10<br>(5)      | N/A<br>(5)     | 10<br>(5)      | 10<br>(5)      | 35<br>(16)     | 50<br>(23)     | Data on larger sizes available on request |                |                |                 |                 |

# Iron Body Swing Check Valve Figure 590J

## Class 125 • Bolted Cap • Flanged

### Figure 590J

Flanged, All Iron

**Size Range:**

2 through 12 inches

**Working Pressures Non-Shock**

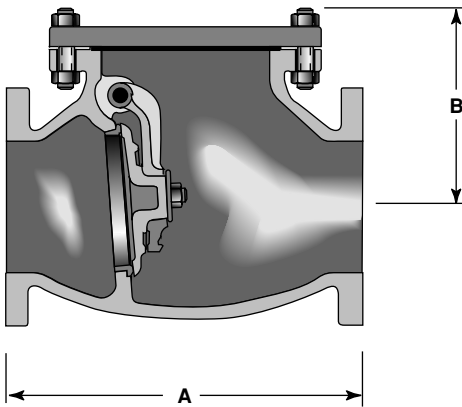
2"-12"

200 psi Cold Working Pressure

### Features

- Design prohibits galling or scoring of seating surfaces because the disc meets the flat seat squarely on closing with no rubbing action
- Large Bolted On Cover
- Hinges are ductile iron
- Integral body seats 8" and smaller
- Replaceable 13% chromium stainless steel hinge pins
- Replaceable hinge pin bushings
- Disc is solid with integral seat face
- ASME (ANSI) B16.1, ASME (ANSI) B16.10
- MSS-SP-71 Type 1 and MSS-SP25

For more detailed features, refer to page 20.



### Principal Parts & Materials

| Fig. No. | Size     | Stem    | Seating  |
|----------|----------|---------|----------|
| 590J     | 2" - 12" | Flanged | All iron |

### Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

|     | 2<br>(50)     | 2 1/2<br>(65) | 3<br>(80)     | 4<br>(100)     | 5<br>(125)     | 6<br>(150)     | 8<br>(200)     | 10<br>(250)    | 12<br>(300)    |
|-----|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A   | 8.00<br>(203) | 8.50<br>(216) | 9.50<br>(241) | 11.50<br>(292) | 13.00<br>(330) | 14.00<br>(356) | 19.50<br>(495) | 24.50<br>(622) | 27.50<br>(699) |
| B   | 4.50<br>(114) | 5.38<br>(137) | 5.88<br>(149) | 6.62<br>(168)  | 7.75<br>(197)  | 8.25<br>(210)  | 10.25<br>(260) | 12.00<br>(305) | 13.75<br>(349) |
| Wt. | 25<br>(11)    | 34<br>(15)    | 44<br>(20)    | 75<br>(34)     | 103<br>(47)    | 127<br>(58)    | 230<br>(104)   | 510<br>(231)   | 675<br>(315)   |

# Iron Body Swing Check Valve Figure 477LJ

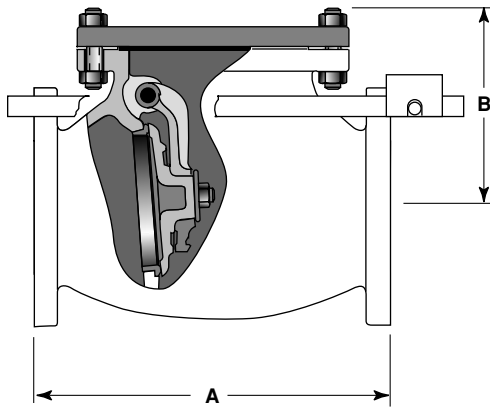
## Class 125 • Bolted Cap • Flanged

### Figure 477LJ

Flanged outside lever and weight with bronze trim

**Size Range:**  
2 through 24 inches

**Working Pressures Non-Shock**  
2"-12"  
125 psi Steam, Basic Rating  
200 psi Cold Working Pressure  
14"-24"  
100 psi Steam, Basic Rating  
150 psi Cold Working Pressure



### Features

- Design prohibits galling or scoring of seating surfaces because the disc meets the flat seat squarely on closing with no rubbing action
- Large Bolted On Cover
- Fig. 447LJ with outside lever and weight is recommended where quick action is necessary to avoid sudden reversal of flow. Weight can be installed to balance the disc when applications require that it open under minimum pressure. Positioning and setting of lever and weight are easily accomplished in the field. Lever can be rotated through 360° and is adjustable in 15° increments. Valves may be installed in horizontal or vertical pipe lines. Basic design of Fig. 447LJ is identical to fig. 587J.

For more detailed features, refer to page 20.

### Principal Parts & Materials

| Fig. No. | Size    | End Conn. | Seating |
|----------|---------|-----------|---------|
| 477LJ    | 2" -24" | Flanged   | Bronze  |

### Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

| Valves | 2<br>(50)     | 2 1/2<br>(65) | 3<br>(80)     | 4<br>(100)     | 6<br>(150)     | 8<br>(200)     | 10<br>(250)    | 12<br>(300)    | 14<br>(350)                               | 16<br>(400)    | 18<br>(450)    | 20<br>(500)     | 24<br>(600)     |
|--------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|---|----------------|----------------|-----------------|-----------------|
| A      | 8.00<br>(203) | 8.50<br>(216) | 9.50<br>(241) | 11.50<br>(292) | 14.00<br>(356) | 19.50<br>(495) | 24.50<br>(622) | 27.50<br>(699) | 31.00<br>(787)                            | 36.00<br>(914) | 38.00<br>(965) | 42.00<br>(1067) | 46.00<br>(1169) |
| B      | 4.50<br>(114) | 5.38<br>(137) | 5.88<br>(149) | 6.62<br>(168)  | 8.25<br>(210)  | 10.25<br>(260) | 12.00<br>(305) | 13.75<br>(349) | 16.88<br>(429)                            | 19.06<br>(484) | 24.00<br>(610) | 27.56<br>(700)  | 31.00<br>(787)  |
| Wt.    | 30<br>(14)    | 40<br>(18)    | 54<br>(24)    | 85<br>(39)     | 137<br>(62)    | 240<br>(109)   | 545<br>(247)   | 745<br>(338)   | Data on larger sizes available on request |                |                |                 |                 |



# Iron Body Swing Check Valve

Figure 477J

**175 CWP • UL/ULC/FM Listed • Flanged Ends**

## Figure 477J

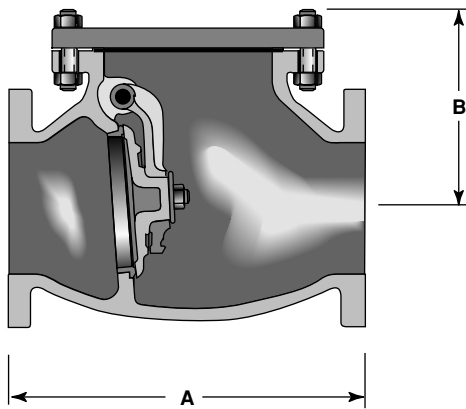
Bolted Cap and Bronze Trim

### Size Range:

3 through 10 inches

### Working Pressures Non-Shock

175 psi Cold Working Pressure



## Features

- Designated especially for the fire protection service. Listed by Underwriter's Laboratories, Inc. and Factory Mutual Research Corp. Valves may be installed horizontally and vertically for upward flow but are not recommended for "interconnection service".
- Body and cap are high-strength cast iron conforming to ASTM A126, Class B.
- Disc is solid bronze in sizes 6" and smaller and bronze-faced iron in 8" and 10", with a bronze collar where it engages the hinge. For the 8" and 10" sizes, the hinge is malleable iron with a bronze hinge-pin bushing and disc-hub bushing. Replaceable seat ring and hinge-pin are bronze.
- Plain-faced, smooth finished end flanges conform to ANSI B16.1, Class 125 requirements.
- UL 312 Standard

For more detailed features, refer to page 20.

## Principal Parts & Materials

| Fig. No. | Size    | End Conn. | Seating |
|----------|---------|-----------|---------|
| 477J     | 3" -10" | Flanged   | Bronze  |

## Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

| Valves | 3<br>(80)      | 4<br>(100)     | 6<br>(150)     | 8<br>(200)     | 10<br>(250)    |
|--------|----------------|----------------|----------------|----------------|----------------|
| A      | 11.00<br>(279) | 13.00<br>(330) | 16.00<br>(406) | 18.00<br>(457) | 22.00<br>(559) |
| B      | 6.75<br>(171)  | 7.50<br>(191)  | 9.25<br>(235)  | 11.25<br>(286) | 13.50<br>(343) |
| Wt.    | 71<br>(32)     | 113<br>(51)    | 193<br>(88)    | 310<br>(141)   | 504<br>(229)   |





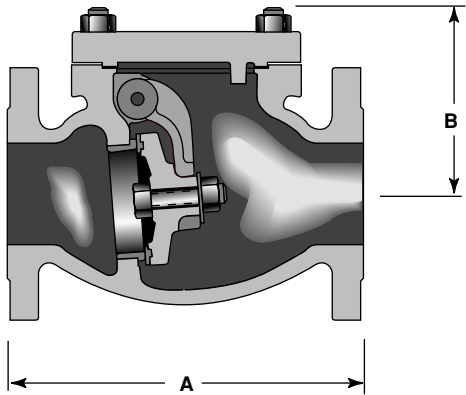
# Iron Body Swing Check Valve Figure 339RJ

## Class 250 • Bolted Cap • Flanged Ends

**Figure 339RJ**

**Size Range:**  
2 through 8 inches

**Working Pressures Non-Shock**  
250 psi Steam, Basic Rating  
500 psi Cold Working Pressure



### Features

- For steam, water, oil, gas and similar high pressure-temperature conditions which do not warrant steel valves. Valves can be installed horizontally, or vertically for upward flow.
- Body and cap are high-strength cast iron conforming to ASTM A126, Class B.
- Disc is solid bronze in sizes 3" and smaller and iron faced with bronze in larger sizes. Body seat ring is screwed-in bronze.
- Disc moves freely for maximum flow with minimum pressure drop. A disc stop, integral with the cap, prohibits the disc from sticking open when flow is reversed.
- ASME (ANSI) B16.1, ASME (ANSI) B16.10
- MSS-SP-85 Type 1 and MSS-SP-25

For more detailed features, refer to page 20.

### Principal Parts & Materials

| Fig. No. | Size   | End Conn. | Seating | Body |
|----------|--------|-----------|---------|------|
| 339RJ    | 2" -8" | Flanged   | Bronze  | Iron |

### Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

| Valves | 2<br>(50)      | 2 1/2<br>(65)  | 3<br>(80)      | 4<br>(100)     | 6<br>(150)     | 8<br>(200)     |
|--------|----------------|----------------|----------------|----------------|----------------|----------------|
| A      | 10.50<br>(267) | 11.50<br>(292) | 12.50<br>(318) | 14.00<br>(356) | 17.50<br>(445) | 21.00<br>(533) |
| B      | 5.25<br>(133)  | 6.00<br>(152)  | 6.25<br>(159)  | 7.25<br>(184)  | 9.00<br>(229)  | 11.00<br>(279) |
| Wt.    | 46<br>(21)     | 64<br>(29)     | 90<br>(41)     | 133<br>(60)    | 250<br>(114)   | 410<br>(186)   |