

**Iron 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 differential pressure and velocity of flow within the line to perform their functions of opening and closing.

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.

Sizing check valves on this basis may often result in the use of valves that are 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 swing check valves designated as Class 125 and 250 comply with MSS SP-71 Standard Practice.

**Tilting Disc Check Valves** are similar in application to swing check valves. Essentially, the tilting disc check valve consists of a cylindrical housing with a pivoted circular disc. The pivots are located just above the center of the disc and offset from the plane of the body seat. This design decreases the travel distance of the disc, and the closing force due to reversal of flow and pressure differential is reduced by pivot location, thereby minimizing slam. The seat is of a circular bevel type and the disc pivots in or out of contact without rubbing or sliding, while full pressure differential acts to seal the disc tightly after seating.

**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. 2" - 12" with lever and weight come with adjustable lever. 14" - 24" valves must be specified for horizontal or vertical orientation.

This will assist the disc to close more rapidly and reduce the possibility of surge and shock.

**Crane 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 ASME B1.20.1.

**Flanged Swing Check Valves** conform to applicable requirements of ASME B16.10 in sizes 2" through 24". End flanges on valves conform to applicable requirements of B16.1 for classes 125 and 250.

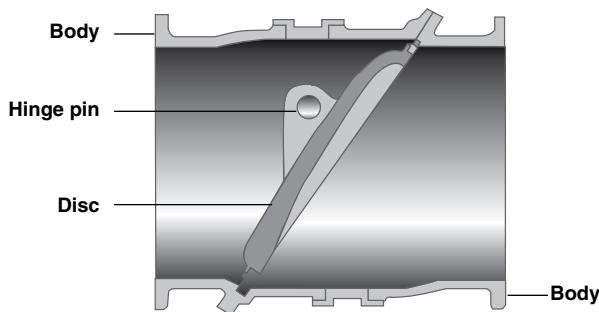
**Bronze Trim Valves** are for steam, water, non-corrosive oil and gas and other fluids that do not corrode bronze.

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

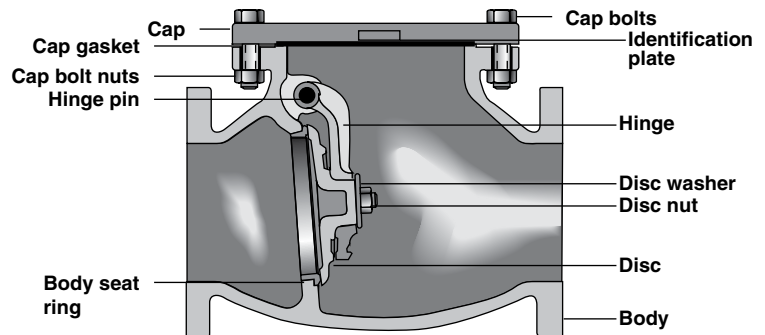
**Valves May Be Installed** in horizontal or vertical pipe lines. In vertical lines, or any angle from horizontal, they can be used for upward flow only.

**Lever and Weight** can be provided upon request to assist disc closure in unusual flow conditions. 2"-12" Figure 383 come standard with an adjustable lever arm which can be orientated in any position in 15° increments. These valves can be installed in horizontal lines, or in vertical lines with upward flow. 14"-24" valves must be specified at the time of inquiry and order with the installation orientation for horizontal or vertical-upward flow.

**Non-Asbestos Gaskets and Packings.**



TILTING DISC



SWING CHECK