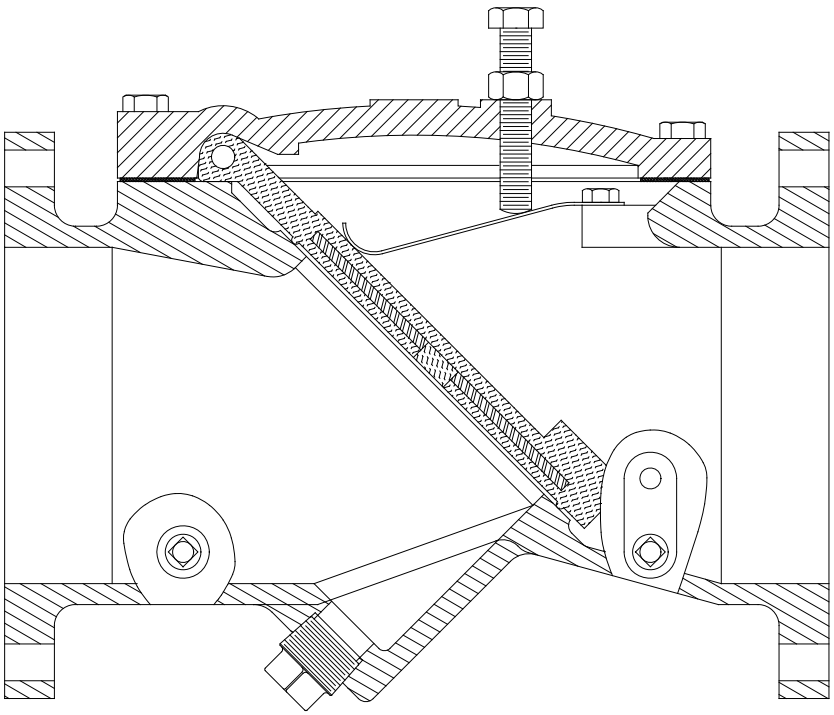
RF-ASR, REV. 0

Crispin Valves
Since 1905

Crispin Rubber Flapper Check Valve with Adjustable Spring Return



INSTALLATION OPERATION and MAINTENANCE MANUAL

Contents

Crispin Valve 600 Fowler Avenue Berwick, PA 18603
P: (800) AIR-VALV or (570) 752-4524 F: (570) 752-4962

Introduction

Like every line of Crispin products, the Crispin Rubber Flapper Check Valve with Adjustable Spring Return has been designed to give years of trouble free operation in some of the most severe applications. This manual should give you the information to properly install and maintain the valve to ensure a long service life. The Crispin Rubber Flapper Check Valve with Adjustable Spring Return is ruggedly constructed with a Ductile Iron Body, Buna Flapper and Stainless Steel Spring Return to give years of trouble-free operation.

The Crispin Rubber Flapper Check Valve with Adjustable Spring Return can be supplied with additional appurtenances, including a Backflow Actuator, Visual Position Indicator and Limit or Proximity Switch.

The Crispin Rubber Flapper Check Valve with Adjustable Spring Return is designed to be similar to the swing type of check valve, except the Crispin Rubber Flapper Check Valve with Adjustable Spring Return has a disc that is encapsulated in rubber. That, plus the angled seating surface area of the valves allows for flows that contain suspended solids, plus reduce head loss.

Receiving and Storage

Upon receipt of valves, inspect them for suspicion of damage during shipment. Carefully unload the valve(s), using the proper equipment. If possible, use eye bolts through the flange holes to lift the valve, or use a sling for lifting. When doing so, be sure that the eyebolts are easily spaced.

Valves should remain packed and kept in a clean and dry environment prior to installation. If valves are stored for an extended period of time (4 months or more), a thin layer of FDA approved lubricant should be applied to the rubber items of the valve.

Operation

The Crispin Rubber Flapper Check Valve with Adjustable Spring Return is designed to automatically prevent reverse flow. During regular system reverse flow conditions, the valve disc quickly switches from the open position to the closed position. The Adjustable Spring Return on the valve adds more force to the valve disc. This adjustment allows the disc to close even faster.

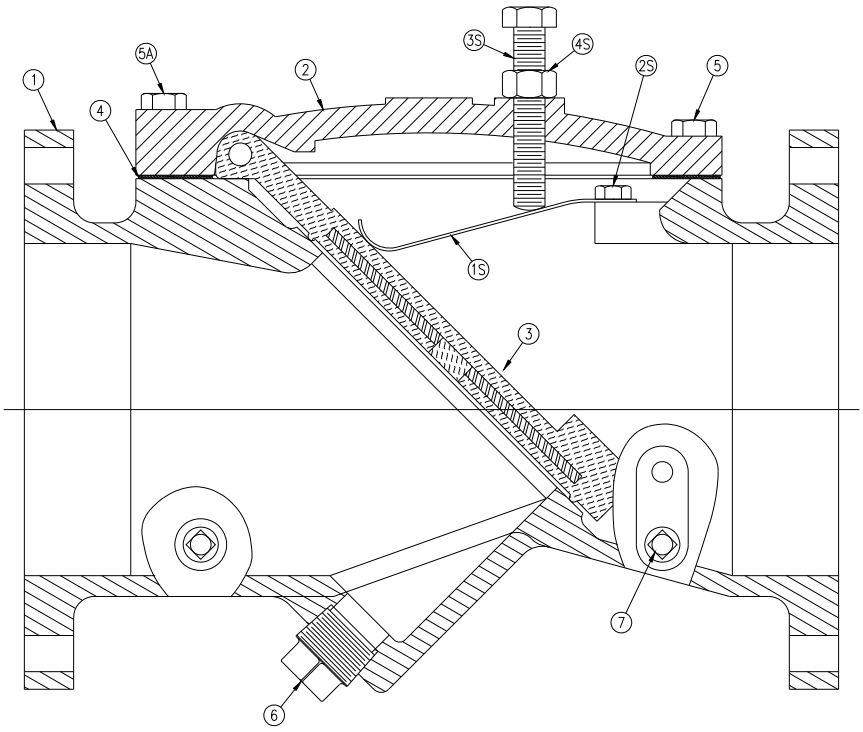
Installation

The Crispin Rubber Flapper Check Valve with Adjustable Spring Return must be properly orientated for installation, with the top cover facing in the upward direction. The flow arrow that is cast in the valve body must be pointed in the correct direction of normal flow at all times.

Flanged ends of valve should be mounted using full faced flange gaskets. The valve and mating piping must be supported to prevent unnecessary stress on the valve or piping. Lubricate flange bolts (or studs) and use the crossover tightening technique to adapt the two mating items.

Once installed, check for leaks and retighten, if needed. Please note that excessive bolt torque may result in damage to the valve flanges.

Rubber Flapper Check Valve with Adjustable Spring Return



ITEM	DESCRIPTION
1	BODY
2	COVER
3	FLAPPER
4	GASKET
5	HEX BOLT
5A	HEX BOLT
6	PIPE PLUG
7	PIPE PLUG
1S	SPRING
2S	BOLT
3S	STOP
4S	STOP NUT

DISASSEMBLY

The valve does not have to be removed from the pipeline for disassembly. All work on the valve should be performed by a skilled mechanic with the proper tools. Please note, the pipeline must be drained before removing the valve cover or bodily harm can occur.

1. Remove Top Cover (2) from Valve Body (1) by turning Bolts (5 & 5A) counter-clockwise. This gives access to the Valve Disc (3).
2. Remove Spring Retaining Bolt (2S) and lift out Spring Return (1S).
3. Inspect Spring Return (1S) for any defects.
4. Using a putty knife or razorblade, scrape off the flange Gasket (4) from the Valve Body (1) and clean the Body (1) and Cover Flange Gasket surfaces with a wire brush.

REASSEMBLY

All parts must be cleaned and gasket surfaces should be cleaned with a stiff wire brush in the direction of the serrations or machine marks. Any worn parts, gaskets and seals should be replaced during reassembly.

1. Install Disc (3) in Valve Body (1).
2. Install Spring Return (1S) in Valve Body (1) and then thread Spring Retaining Bolt (2S) through spring and into the Valve Body (1) by turning clockwise. Tighten snug, plus on-half turn.
3. Apply top flange gasket (4) to the valve body. Be sure to align the gasket so that the center holes are concentric with each other.
5. Gently lower the Cover Flange (2) onto the Valve Body. Once aligned, use Cover Bolts (5 & 5A) and tighten.

Maintenance

Crispin Rubber Flapper Check Valves with Adjustable Spring Return require no scheduled lubrication or maintenance.

Service

Parts and service are available from your local representative or distributor. Make note of the Valve size, operating pressure and model number located on the valve tag.

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