



## TECHNICAL DATA

## FLOAT CHECK VALVE ASSEMBLY MODELS B-1 & B-2

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

### 1. PRODUCT DESCRIPTION

The Viking Model B-1 or B-2 (corrosion resistant) Float Check Valve Assembly is utilized in dry pipe systems with a Model E Accelerator and the Model F-1 or F-2 Dry Valves, and in TotalPac2 Double Interlock Preaction Systems. The Float Check Valve Assembly protects pneumatic devices from water columning and reset due to system pressure. The Float Check Valve Assembly is designed to allow air to pass in both directions for system set up and for sensing during supervision and operation of the sprinkler system.

### 2. LISTINGS AND APPROVALS

UL Listed with systems  
FM Approved with systems

### 3. TECHNICAL DATA

Available since 2003.

#### Specifications:

Rated to 250 psi (17.2 Bar) water pressure

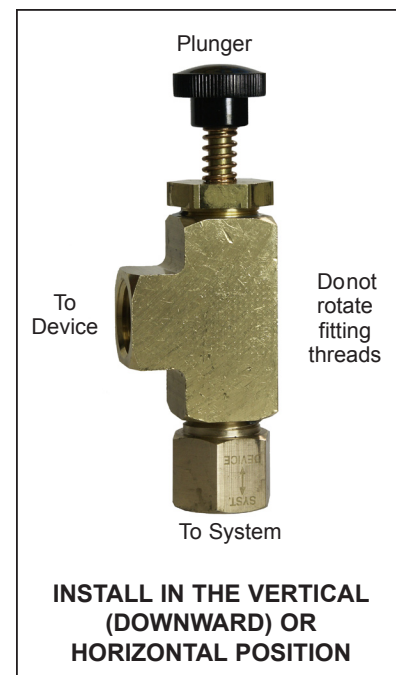
#### Material Standards:

See Table 1.

#### Ordering Information:

Model B-1 Brass Part Number 12116  
Model B-2 Corrosion Resistant Part Number 12084

Viking Technical Data may be found on  
The Viking Corporation's Web site at  
<http://www.vikinggroupinc.com>.  
The Web site may include a more recent  
edition of this Technical Data Page.



### 4. INSTALLATION

- Remove all thread protector inserts.
- The Float Check Valve Assembly requires two ½" (15 mm) NPT pipe connections. Refer to System Trim Charts for piping arrangement.

NOTE: On occasion during initial set up of the system, if the air supply is initially added at a rapid rate, the air flow velocity to the pneumatic device can move the ball toward the seat, thus preventing the pneumatic device from setting properly. This will be observed on the air pressure gauge on the pneumatic device sensing line of all systems. By pushing down lightly on the plunger, the ball will be removed from the seat and the system will proceed to pressurize properly. (Note when installing the Float Check Valve Assembly, do not rotate the hex float check fittings attached to the tee fitting of the assembly. This would reposition the plunger and possible damage to the poly ball could occur due to plunger operation). The Float Check Valve Assembly is marked with an arrow to point toward the system. The female connection toward the system must be mounted in a horizontal or vertical downward position toward the sprinkler system.

- If replacement is needed, the complete assembly must be replaced. If replacing a Model A-1 Float Check Valve, replace with a Model B-1 or B-2 Float Check Valve Assembly (see Figure 2).
  - Remove the existing elbow or tee above the existing Model A-1 Float Check Valve and install a new assembly.
  - Adjustment of the nipple beneath the assembly may be required.

### 5. OPERATION

When water from the system enters the Float Check Valve Assembly due to system operation, the polypropylene ball floats against the gasketed seat and prevents water from entering the pneumatic actuator of preaction systems, or the accelerator of dry pipe systems. The Float Check Valve Assembly includes a sealed plunger that will allow resetting of the ball to disengage from the seat. The Float Check Valve Assembly protects the anti-flood device and the pneumatic actuator and accelerator from becoming pressurized and closing once the system has operated.

### 6. INSPECTION, TESTS AND MAINTENANCE

**NOTE:** Where difficulty in performance is experienced, the valve manufacturer or authorized representative shall be contacted.

**WARNING:** Any system maintenance or testing that involves placing a control valve or detection system out of service may eliminate the fire protection of that system. Prior to proceeding, NOTIFY all Authorities Having Jurisdiction. Consideration should be given to employment of a fire patrol in the affected area.

- The Viking Float Check Valve Assembly must be kept free of foreign matter and freezing conditions that could impair its operation. At regular intervals, at least annually, inspect and test the Float Check Valve Assembly. The frequency of the inspections is dependent upon the condition of the water and release system.



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**B. Inspection:**

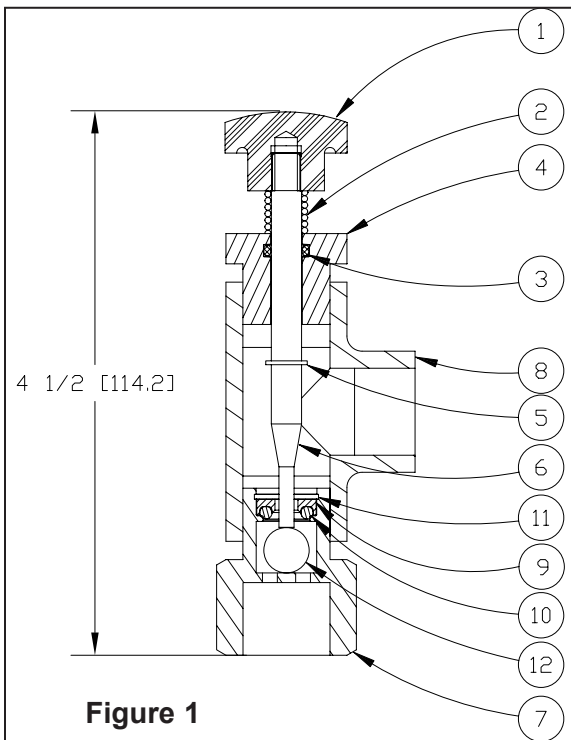
1. Place the fire protection system out of service.
2. Remove the Float Check Valve Assembly from trim piping. Visually inspect the Float Check Valve Assembly for debris or foreign matter build-up. If debris or foreign matter is present, flush Float Check Valve Assembly with clean water. If debris or foreign matter cannot be flushed from the Float Check Valve Assembly, it must be replaced.
3. After inspection is complete, place system back in service.

### 7. AVAILABILITY

The Viking Float Check Valve Assembly is available through a network of domestic, Canadian, and international distributors. See the Viking web site for closest distributor or contact The Viking Corporation.

### 8. GUARANTEES

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.



**Figure 1**

**TABLE 1: COMPONENT LISTING**

ITEM	DESCRIPTION	MATERIAL
1	Knob	Plastic w/1/4-20 UNC Tapped Metal Insert
2	Spring	Phosphor Bronze (Stainless Steel UNS-S31600 for corrosion resistant Model B-2)
3	O-ring	Nitrile, Buna N
4*	Nut	UNS-C36000 Brass
5	Ring, Plunger Stem	UNS-S15700 Stainless Steel
6*	Stem - Float Check	UNS-C36000 Brass
7*	Body, Check Valve	Aluminum Silicon Bronze Alloy 642
8*	1/2 Tee	Brass, UNS-C84400
9*	Insert, O-Ring Keeper	Aluminum Silicon Bronze Alloy 642
10	O-Ring	70 Duro Viton, Teflon Coated
11	Internal Retaining Ring	Stainless Steel
12	Ball	3/8" Polypropylene, Grade 1000P

Parts are not replaceable. Order complete assembly for replacement.

\* Items are coated with electroless nickel plating for corrosion resistance for the corrosion resistant Model B-2.



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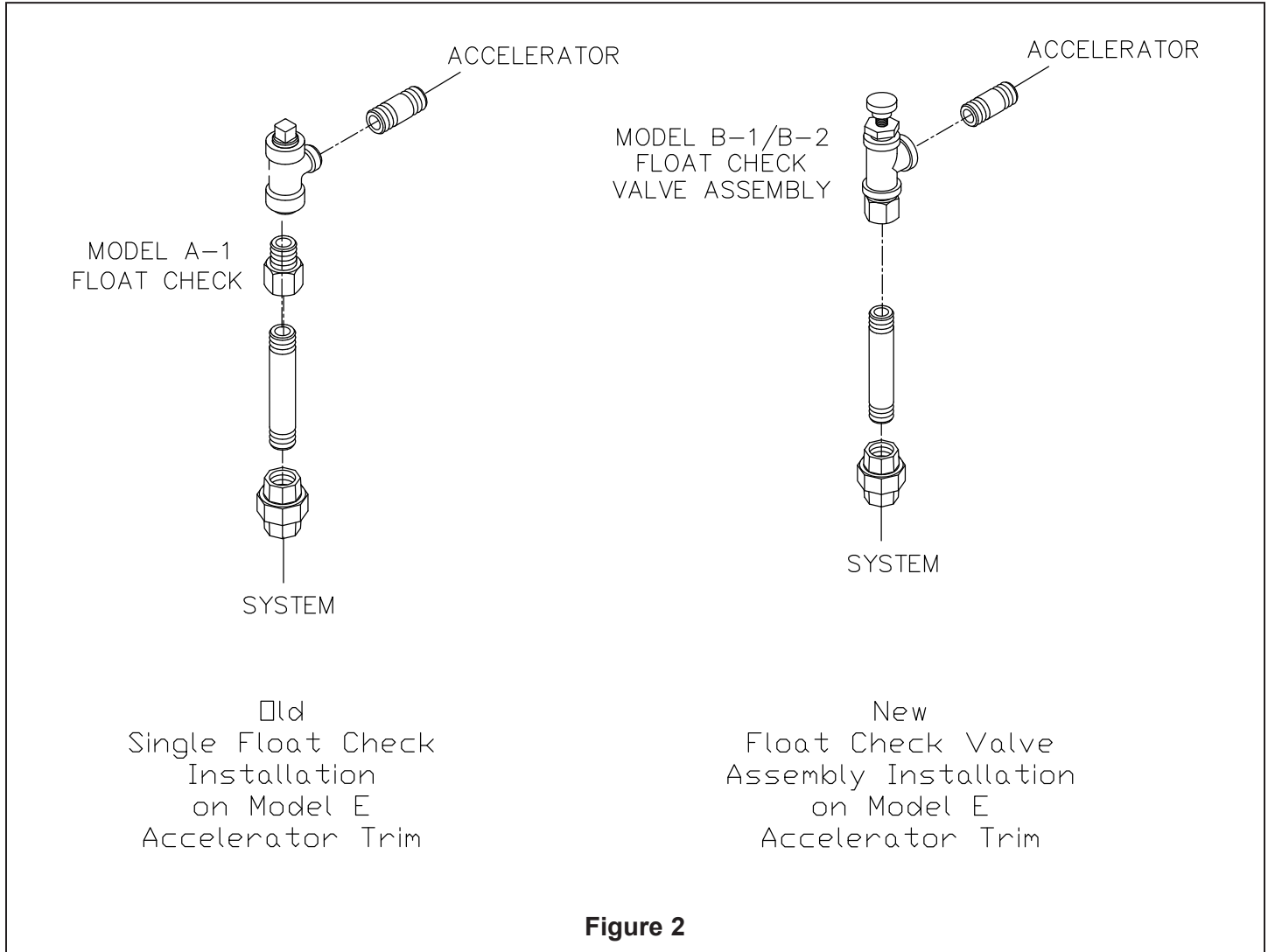


Figure 2

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