

Series 800M4 and LF800M4

Anti-Siphon Pressure Vacuum Breaker

featuring Replaceable Seats

Sizes: ½" - 2" (15 - 50mm)

Function: To protect the potable water supply from backflow from a non-potable source due to a drop in supply.

Protection: Pressure i.e. backsiphonage

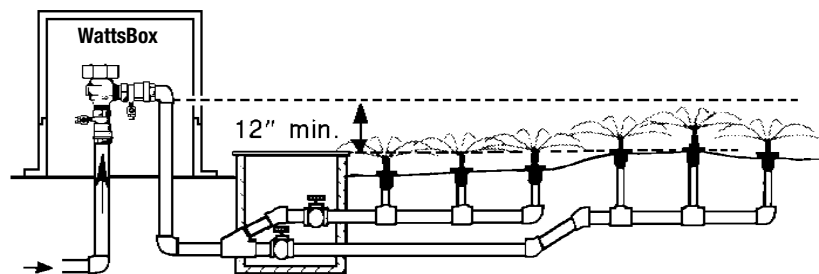
Installation

Requirements:

1. Install 12" (305mm) above highest point of downstream piping.
2. Install bonnet side up and allow for accessibility for testing/service.
3. Install where discharge or spillage is not objectionable.
4. Do not undersize supply or oversize the valve in relation to demand.
5. Do not install where backpressure can occur.
6. Protect from freezing - for Freeze Protection specify No. 800M4-FR or LF800M4-FR ½" - 2" (15 - 50mm) . Freeze protection can also be provided using a WattsBox insulated enclosure. Send for ES-WB for additional information.
7. ASSE Standard 1020 requires that the atmospheric vent valve remains open until the valve body pressure exceeds 1 lb. Until this pressure is reached, some amount of spillage will occur at the atmospheric vent. In order to minimize this leakage on **start-up** close the down stream shutoff valve and open inlet shutoff valve quickly

Recommended Service:

1. Test periodically as required by local jurisdictional authorities.
2. Open test cocks to drain in cold climates if only operated seasonally.
3. **Replace** rubber goods every 5 years.



Watts 800M4QT
½", ¾"
(15, 20mm)



Watts 800M4QT
1" - 2" (25 - 50mm)

Pressure — Temperature

Working Temperature: 33°F - 140°F (.56°C - 60°C)

Maximum Pressure: 150psi (10.3 bar)

Min. Pressure: 15psi (103 kPa)

CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65

Limited Warranty: Watts Regulator Co. (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

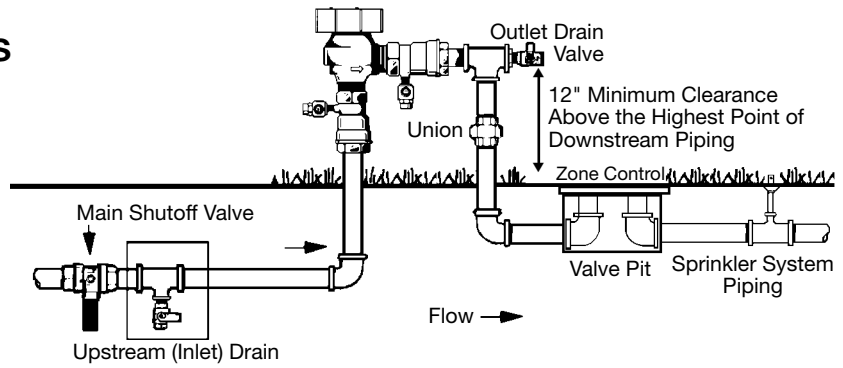
The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights. **SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL SHIPMENT.**

Freeze Protection Guidelines

Purging of a PVB Assembly with Pressurized Air

1. Close main shutoff valve.
2. Open upstream drain, test cocks and isolation ball valves to depressurize line.
3. Should you "blowout" the piping system downstream of the backflow prevention assembly, make sure the outlet drain valve is open and the backflow prevention outlet shutoff valve is closed. Connect an air line to the outlet drain valve and introduce air of adequate volume to clear downstream system of water.
4. Leave test cocks and isolation ball valve handles in 45° angle to drain ball valves and prevent casting damage.

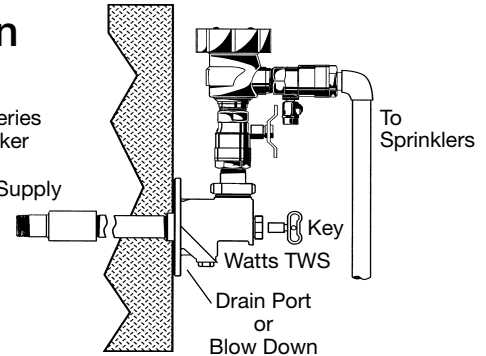


Typical Installation

Using TWS Hydrant

TWS with Watts 800 Series Pressure Vacuum Breaker

Note: PVB's must be installed a minimum of 12" (305mm) above the highest point of water in the sprinkler system.



Service and Replacement Parts

Internal parts can be removed, repaired or inspected without removing the valve from the piping.

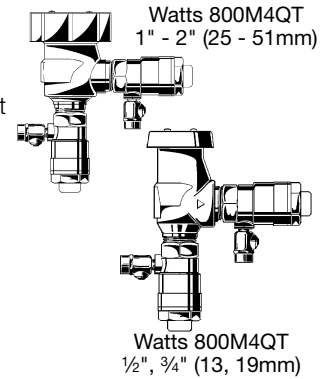
Disassembly

1. Shut off the supply pressure and drain the valve.
2. Remove the two hood screws and the hood.
3. Place a wrench on the parallel flats of bonnet and stem assembly. Turn counter clockwise and remove.
4. Remove the vent assembly.
5. Press down on the spring retainer and disengage it from the retaining lugs. Then turn 90° and remove.

6. Remove the spring retainer and spring. Note that the large diameter of the spring is down on the guide assembly.
7. Remove the check disc holder and guide assembly.
8. Disassemble the check disc holder assembly.

Reassembly

Reassemble in the reverse order utilizing the new parts from the repair kit.



800M4 or LF800M4 Repair Kits

Ordering Code	Model	Size	
		in.	mm
Check Kits			
887703	*RK 800M4 CK	1/2, 3/4	15, 20
887704	*RK 800M4 CK	1	25
887705	*RK 800M4 CK	1 1/4 - 2	32 - 50

Kits consist of: Check disc assembly (disc & disc holder). Bonnet O-ring and Check Spring.

Vent Float Kits

887709	RK 800M4 V	1/2, 3/4	15, 20
887710	RK 800M4 V	1	25
887711	RK 800M4 V	1 1/4 - 2	32 - 50

Kits consist of: Float vent disc assembly (vent float, seal & spring) and Bonnet O-ring.

Freeze Protection Float Kit

887725	RK 800M4 FRV	1/2, 3/4	15, 20
887715	RK 800M4 FRV	1	25
887716	RK 800M4 FRV	1 1/4 - 2	32 - 50

Kit consists of: Float, vent spring and Bonnet O-ring.

Bonnet Assembly Kits

887700	RK 800M4 B	1/2, 3/4	15, 20
887701	RK 800M4 B	1	25
887702	RK 800M4 B	1 1/4 - 2	32 - 50

Kits consist of: Bonnet, Bonnet O-ring, Vent spring, hood & hood screws.

For Retrofit of Standard and LF Models M2 & M4 to M4FR

Ordering Code	Model	Size	
		in.	mm
887726	Retro 800M4 FR	1/2, 3/4	15, 20
887717	Retro 800M4 FR	1 1/4 - 2	32 - 50

Kits consist of: Float, spring, Bonnet and Bonnet O-ring.

Ordering Code	Model	Size	
		in.	mm
Rubber Parts Kits			
887706	RK 800M4 RT	1/2, 3/4	15, 20
887707	RK 800M4 RT	1	25
887708	RK 800M4 RT	1 1/4 - 2	32 - 50

Kits consist of: Vent disc, Check disc and Bonnet O-ring.

Seat Kits

887712	RK 800M4 S	1/2, 3/4	15, 20
887713	RK 800M4 S	1	25
887714	RK 800M4 S	1 1/4 - 2	32 - 50

Kits consists of: Seat, Seat O-ring and Bonnet O-ring.

Note: *Fits 800M4 FR Model

Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



A Watts Water Technologies Company



USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.watts.com

Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca