

Series 719

Double Check Valve Assembly

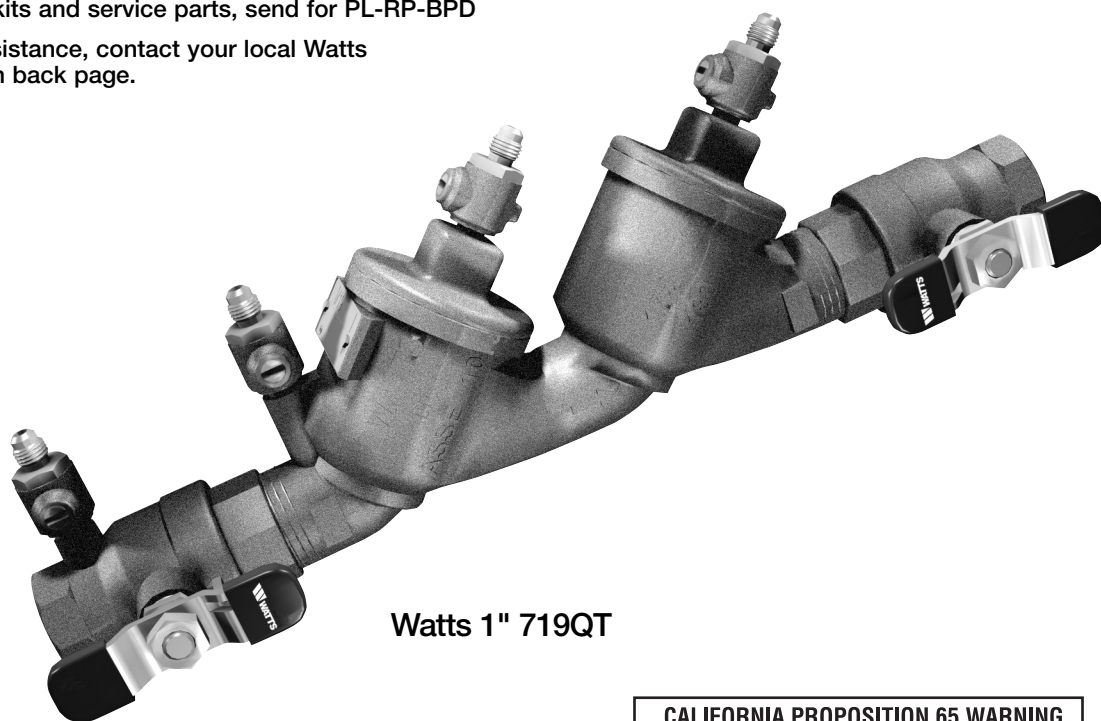
Sizes: 1/2" – 2"

- Installation
- Service
- Repair Kits
- Maintenance

For field testing procedure, send for IS-TK-DL, IS-TK-9A, IS-TK-99E and IS-TK-99D

For other repair kits and service parts, send for PL-RP-BPD

For technical assistance, contact your local Watts representative on back page.



Watts 1" 719QT

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. (Installer: California law requires that this warning be given to the consumer.)

For more information: www.wattsind.com/prop65

IMPORTANT: Inquire with governing authorities for local installation requirements.

NOTE: For Australia and New Zealand: Pipeline strainers should be installed between the upstream shutoff valve and the inlet of the backflow preventer.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. 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.

LIMITED WARRANTY: Watts Regulator Company warrants each product against defects in material and workmanship 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. This shall constitute the exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental or consequential damages, including without limitation, damages or other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemicals, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. THE COMPANY MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED EXCEPT AS PROVIDED IN THIS LIMITED WARRANTY.



Installation Instructions

Series 719 Double Check Valve Assemblies

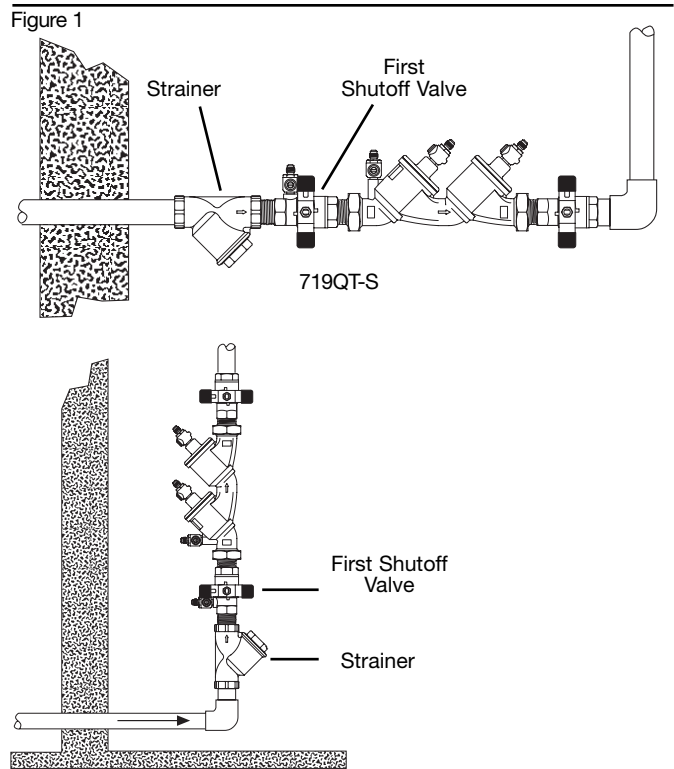
Indoors - Figure 1

Check local codes for installation requirements. Pipe lines should be thoroughly flushed to remove foreign material before installing the unit. A strainer should be installed as shown, ahead of backflow preventer to prevent disc from unnecessary fouling. Install valve in the line with arrow on valve body pointing in the direction of flow.

For indoor installations, it is important that the valve be easily accessible to facilitate testing and servicing. Do not install in a concealed location.

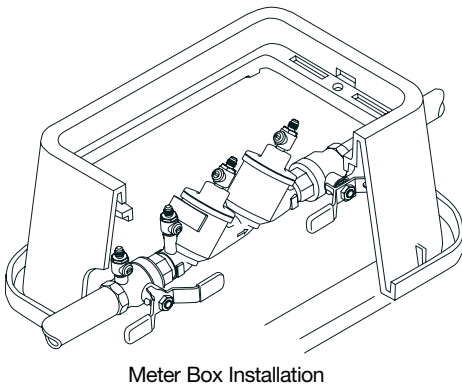
CAUTION: Do not install with strainer when backflow preventer is used on seldom-used water lines which are called upon during emergencies, such as fire sprinkler lines, etc. It is important that Series 719 be tested periodically in compliance with local codes, but at least once a year or more often depending upon system conditions. Regular inspection, testing and cleaning assures maximum life and proper product function.

NOTE: Fire Protection System Installations
The National Fire Protection Agency (NFPA) Guidelines require a confirming flow test to be conducted whenever a "main line" valve such as the shut-off valves or a backflow assembly have been operated. Certified testers of backflow assemblies must conduct this test. The trim valves of the confirming flow test must be closed during the test. When the test is completed the trim valves must be returned to a fully open position.

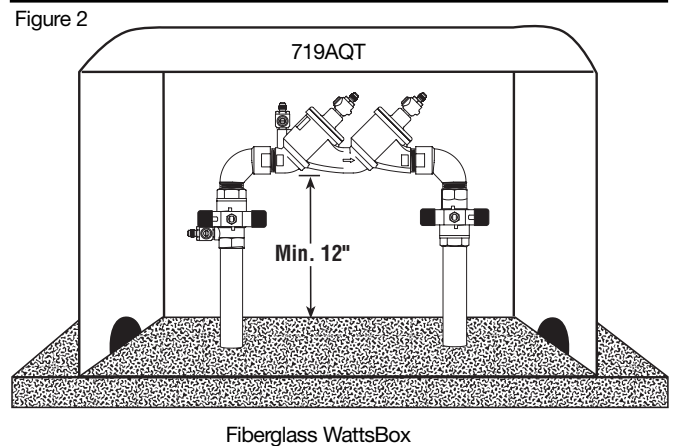


719QT-S Vertical flow-up or vertical flow-down installation (flow-up shown)

Outside - Figure 2



Meter Box Installation



Fiberglass WattsBox

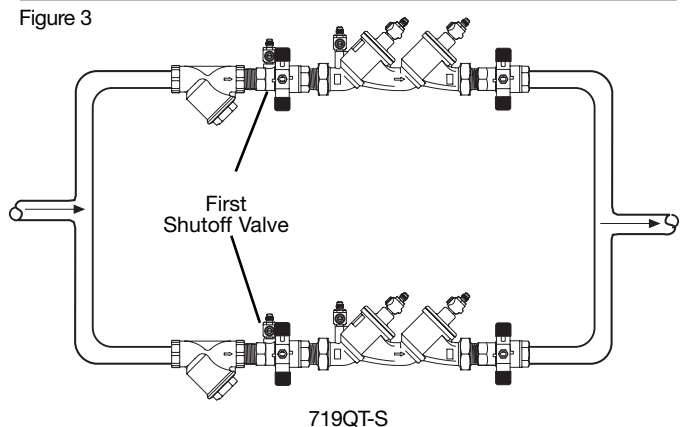
Now Available, WattsBox Insulated Enclosures.
For more information, send for ES-WB or ES-WB-T.

Parallel - Figure 3

Where approved by code, Watts recommends a custom engineered Watts PVS Series water supply valve station consisting of two or more 719 Series valves piped in parallel to serve a larger supply main. This type of installation is employed whenever it is required to maintain water flow to a facility. Typical applications include hospitals, multi-family dwellings, malls and other similar applications.

A properly designed Watts PVS valve station provides redundant flow paths, a continuous supply of adequate water, testing and servicing of an individual valve without supply interruption, and long service life.

The size, quantities and design of parallel valve installations should be exactly in accordance with the engineer's judgment and the published Best Practice Guide of Watts Regulator wherever possible. For a copy of the Watts Best Practice Guide, call Watts Regulator at 1-800-617-3274.



719QT-S

Service, Replacement Parts and Maintenance

Servicing the First and Second Check Valves

NOTE: Before servicing be certain water is turned off or shut-off valves are closed

1. Close shut off valves up and downstream of the valve.
2. Using an appropriate sized wrench, loosen the check valve cover. Unscrew the check valve cover and lift off.
3. Remove spring.
4. Lift out disc holder assembly from body of valve.
5. To reverse the seat disc, unscrew disc screw and disassemble disc washer and disc rubber from disc holder assembly. Reverse rubber so opposite face is showing. Assemble disc screw through disc washer and rubber and screw into disc holder.
6. To replace seat module, pull out of body by gripping at reinforcement ring. Replace seat module with new component by placing into body seat bore. Tightening cover will engage seat properly.
7. Insert disc holder assembly back into seat module.
8. Replace spring insuring that it seats properly on disc holder.
9. Place cover onto spring with internal guide on cover positioned inside end coil.
10. Screw cover onto valve body.
11. Tighten cover wrench tight.
10. Open shut off valves.

1/2" – 2" Repair Kits

When ordering, specify ordering code number, kit number and valve size

1st or 2nd Check Kits

ORDERING CODE	KIT NO.	SIZE
0888100	RK 719R10 CK4	1/2" – 3/4"
0889060	RK 719 CK4	1/2"
0889061	RK 719 CK4	3/4"
0889062	RK 719 CK4	1"
0888101	RK 719 CK4	1 1/4" – 1 1/2"
0888102	RK 719 CK4	2"

Kit consists of: Disc holder, Spring and Cover O-ring

1st or 2nd Check Rubber Parts Kits

0888103	RK 719R10 RC4	1/2" – 3/4"
0889063	RK 719 RC4	1/2"
0889064	RK 719 RC4	3/4"
0889065	RK 719 RC4	1"
0888104	RK 719 RC4	1 1/4" – 1 1/2"
0888105	RK 719 RC4	2"

Kit consists of: Disc rubber, Seat O-ring and Cover O-ring

1st or 2nd Check Seat Kits

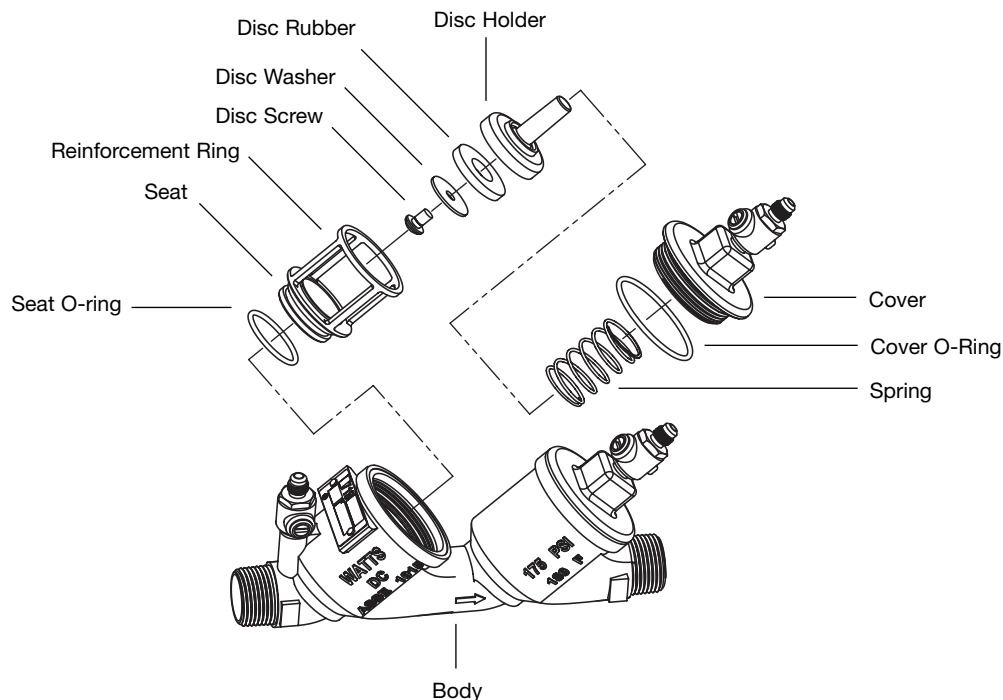
0888997	RK 719R10 S	1/2" – 3/4"
0889069	RK 719 S	1/2"
0889070	RK 719 S	3/4"
0889071	RK 719 S	1"
0888998	RK 719 S	1 1/4" – 1 1/2"
0888999	RK 719 S	2"

Kit consists of: Seat, Seat O-ring and Cover O-ring

1st or 2nd Check Cover Kits

0888106	RK 719R10 C	1/2" – 3/4"
0889066	RK 719 C	1/2"
0889067	RK 719 C	3/4"
0889068	RK 719 C	1"
0888107	RK 719 C	1 1/4" – 1 1/2"
0888108	RK 719 C	2"

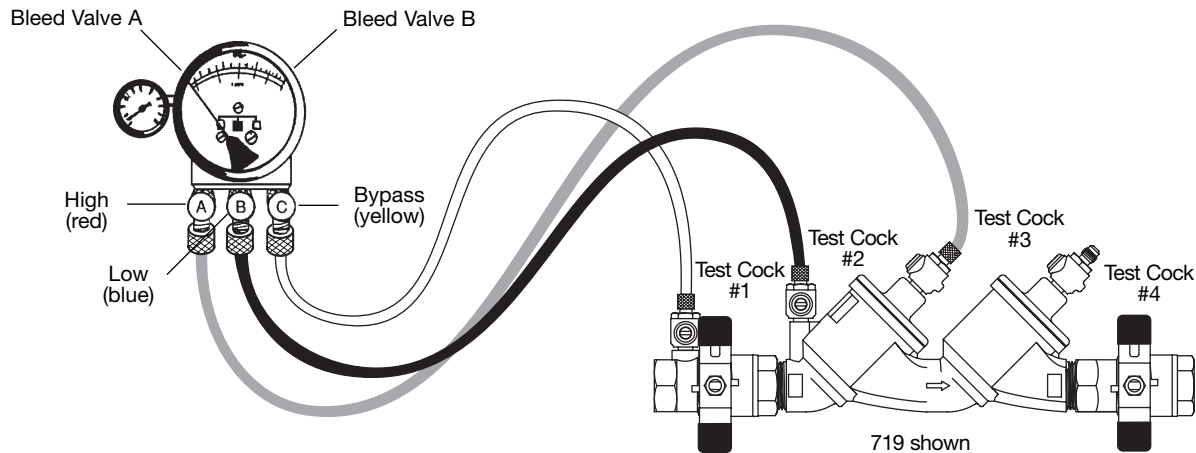
Kit consists of: Cover and Cover O-ring.



Test Procedure for Double Check Valve Assemblies

- A. Before starting test, all needle valves and bleed valves on test kit must be closed.
- B. Flush test cocks before test.

NOTE: Supply pressure gauge reading will decrease when performing this test procedure.



Test Check Valve No. 1

NOTE: Close all needle valve "A", "B" and "C" and bleed valve "A" and "B" on test kit.

- Step 1** Insure shutoff No. 1 is open, shutoff No. 2 is closed.
- Step 2** Install high side hose between connection "A" high side and test cock No. 3, low side hose between "B" low side and test cock No. 2 and open both test cock No. 2 and 3.
- Step 3** Open bleed valve "A" to bleed air from the high side. Close "A" then open bleed valve "B" to bleed low side. Close "B".
- Step 4** Connect bypass hose between connection "C" bypass and loosely to test cock No. 1. Open needle valves "A" high side and "C" bypass to vent air from bypass hose. Tighten bypass hose at test cock No. 1, open test cock No. 1.
- Step 5** Close shutoff No. 1. Slowly open bleed "B" until differential gauge rises to 2 PSI and close. If the differential reading does not decrease, record check valve as "tight".
- Step 6** Close all test cocks and open bleed valves "A" and "B". Then close needle valves "A", "B" and "C" and bleed valves "A" and "B". Remove hoses from test cocks.

Test Check Valve No. 2

- Step 7** Move the high side hose to test cock No. 4, low side hose to test cock No. 3 and open both test cock No. 3 and 4. Remove bypass hose from test cock No. 1, open shutoff valve No. 1.

- Step 8** Open bleed valve "A" to bleed air from the high side. Close bleed "A" then open bleed "B" to bleed low side. Close bleed "B".
- Step 9** Connect bypass hose loosely to test cock No. 1. Open needle valves "A" high side and "C" bypass to vent air from the bypass hose. Tighten bypass hose at test cock No. 1, open test cock No. 1.
- Step 10** Close shutoff No. 1, then slowly open bleed "B" until differential gauge rises to 2 PSI and close. If the differential reading does not decrease, record check as tight. Close all test cocks and re move hoses. Open bleed valves "A" and "B". Restore valve to original working condition.

NOTE: The assembly will fail both the first and second check valve tests above, if shutoff No. 2 leaks excessively. To test for a leaky No. 2 shutoff, use the following procedure.

Test for Leaky No. 2 Shutoff

- Step 11** Connect the high side hose to test cock No. 1, low side hose to test cock No. 4. Open test cocks No. 1 and 4. Close shutoffs No. 1 and 2.
- Step 12** Close needle valve "C" bypass. Open needle valve "A" high side, then open needle valve "B" low side one turn, loosen hose at test cock No. 4 to remove air. Retighten hose.
- Step 13** If the differential gauge rises above 0 there is excessive leakage at shutoff No. 2 and it must be replaced to test the assembly.



Watts USA Web Site: www.wattsreg.com • Watts Canada Web Site: www.wattscda.com