Installation, Maintenance, & Repair Series 7 Dual Check Valves

LF7/7, LF7R, LF07S/07S, LF7C/7C, 7B, LFL7/L7, and LFCu7/Cu7

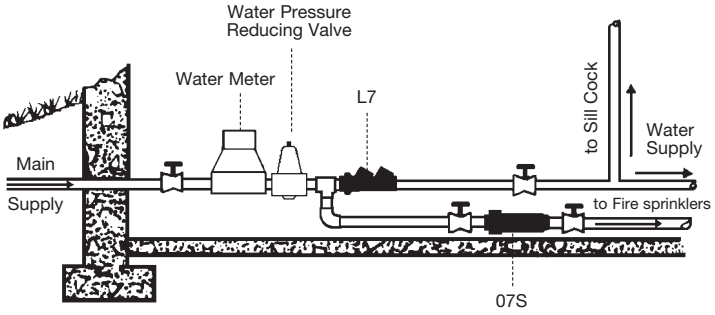
Sizes: ½" – 2" (15 – 50mm)

⚠ WARNING

You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product. **FAILURE TO COMPLY WITH PROPER INSTALLATION AND MAINTENANCE INSTRUCTIONS COULD RESULT IN PRODUCT FAILURE WHICH CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.** Watts is not responsible for damages resulting from improper installation and/or maintenance.

Local building or plumbing codes may require modifications to the information provided. You are required to consult the local building and plumbing codes prior to installation. If this information is not consistent with local building or plumbing codes, the local codes should be followed.

Need for Periodic Inspection/Maintenance: This product must be tested periodically in compliance with local codes, but at least once per year or more as service conditions warrant. Corrosive water conditions, and/or unauthorized adjustments or repair could render the product ineffective for the service intended. Regular checking and cleaning of the product's internal components helps assure maximum life and proper product function.



Basic Installation Instructions

A. Watts dual check valves may be installed in either a vertical or a horizontal position. Series 7 & LF7 should be installed downstream of the water meter and of the water pressure regulator. All outlets including sill cocks must be downstream of the Series 7. Model 07S & LF07S should be installed at the fire sprinkler service connection to the main line.

B. They should always be installed in an accessible location to facilitate the removal for servicing and testing.

C. Pipe lines should be thoroughly flushed to remove foreign material before installing the unit.

D. Protect from freezing

E. Ensure that valve is installed in proper flow direction. Refer to flow direction arrow on valve nameplate or body.

F. When installing valve in pipe line, only use wrenching flats provided. Do not apply wrench to body of valve. This will prevent distorting the valve body and component parts.

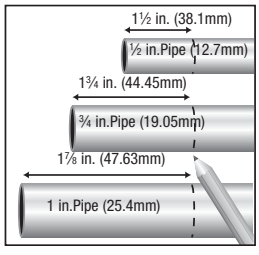
G. These valves incorporate an O-ring union seal that requires minimum tightening of union nut. Do not overtighten.

H. These valves contain plastic check modules and should never be directly sweated into the line. Sweat fit adapters should be sweated into the line prior to valve installation.

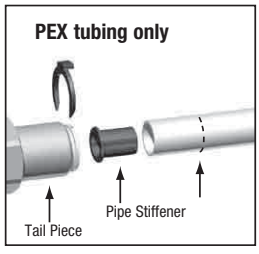
I. Avoid improper application and excessive pipe sealants such as teflon® tape and pipe dope.

Quick-Connect Installation

To Connect:



1. Mark pipe as shown. This is pipe insertion depth.
2. Clean pipe end.



3. If using PEX tubing, insert pipe stiffener (provided) into end of pipe.
4. Push tubing into tailpiece up to mark.
5. Insert collet clip.

To Disconnect:

1. Remove collet clip.
2. Depress collet.
3. Pull tubing from tailpiece.

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.

⚠ WARNING

When a pressure reducing valve or dual check valve is installed in the supple line, it creates a closed system which makes plumbing code compliance imperative for system safety. Special attention must be given by all concerned to assure pressure relief protection is provided to protect water heater equipment. It is important to make certain an approved ANSI Z21.22 temperature and pressure relief valve is installed on the storage water heater. This device is designed for emergency safety relief and should not be used as an operating control.

High System Pressure

If the downstream system pressure is higher than the set pressure under a no flow condition, the cause could be thermal expansion. Thermal expansion occurs whenever is heated in a closed system.

You must make provisions for thermal expansion protection of your plumbing system and components when installing a pressure reducing valve or dual check valve in the supply line.

The use of pressure relief valves such as *Watts 530C, *BRV, *Governor 80, *3L and or a potable water expansion tank such as the Watts DETA and PLT may be required.

To determine if this is the result of thermal expansion, try briefly opening the cold water tap. If the increased pressure is caused by thermal expansion, the pressure will immediately be relieved and the system will return to the set pressure. Watts offers a pressure test gauge, model 276H300 to assist you in determining if you have high water pressure. The 276H300 when attached to a hose bibb registers the highest pressure reading over the period of time it is left on the system.



Watts 276H300

***NOTE:** The Watts 530C, BRV, Governor 80 and 3L are not ASME approved safety relief valves. Under no circumstances should these devices be used in place of an ASME approved valve. Consult your local water code authority to ensure installation compliance.

Service, Replacement Parts and Maintenance

Series 7 Dual Check Valves

LF7/7, LF7R, LF07S/07S, LF7C/7C, 7B, and LFCu7/Cu7

1. Remove the Series 7 from the line (union nut and adapter remain in the line).
2. Remove the two check modules by pressing firmly from the outlet end (end with wrench pads). O-ring seals will be removed with the removal of modules from the body.

CAUTION:

To prevent damage to O-ring seals, do not attempt to pry the O-ring seal free before removing check modules. **NOTE:** Complete check module assemblies are available as replacement parts. It is recommended that if check modules are fouled, that the entire check module be replaced.

3. Inspect body bore and clean surfaces of any foreign material.
4. Using silicone grease, apply small amount to each exterior surface of the O-ring seals. If O-ring is to be replaced, lubricate as above. A light application of silicone grease to inlet of body bore is beneficial. Do not lubricate seat of seat disc.

NOTE: Only FDA approved silicone grease should be used and is furnished with each Watts Models LF7/7, LF07S/07S and LF7R dual check repair kit.

5. Reinsert the check modules and O-rings into body in direction of flow.

NOTE 1: For the 1" and 1 ¼" 07S the spacer slots must be aligned with the ribs of the first check module before inserting

NOTE 2: 1st and 2nd check modules are identical and interchangeable. Do not overtighten union nut.

Servicing Valves LF7/L7

1. Shut off water at street side of meter.
2. Remove covers and remove Disc Assembly.
3. Inspect rubber disc for dirt or debris.
4. Clean and/or replace as needed.
5. Inspect machined seat area for nicks and mineral build up clean with emery cloth.
6. Reassemble the check assembly in the reverse order. (1st and 2nd check modules are identical and interchangeable)

WARNING!

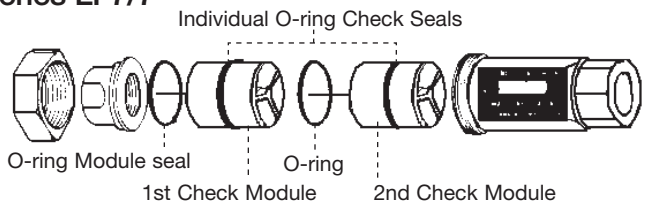
For valves with CPVC or PEX end connections do not exceed the tubing manufacturers pressure and temperature ratings. Refer to the tubing manufacturers product specifications for that information.

CALIFORNIA PROPOSITION 65 WARNING

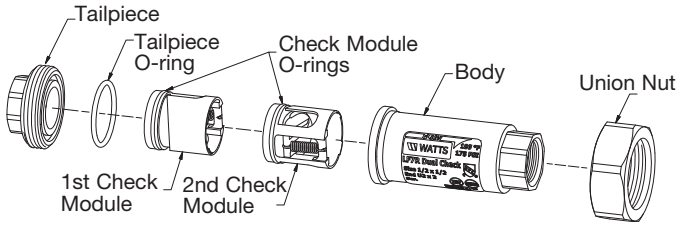
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65

Series LF7/7



Series LF7R

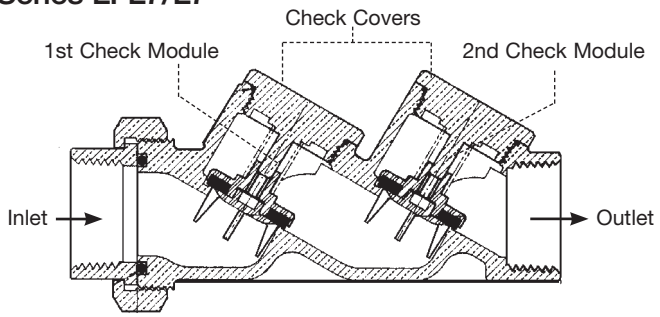


Kit for Series LF7/7, LF07S/07S, LF7C/7C, 7B and LFCu7/Cu7

	ORDER CODE	KIT NO.	SIZE in.	SIZE mm
LEAD FREE*	0886015	RK 7 T	½ -1¼ 7 ½ - 1 Cu7	15 – 32 15 – 25
LEAD FREE*	0886017	RK 07S T	1 - 1¼ 07S	25 – 32
LEAD FREE*	0886016	RK 7B T	¾ 7B	20
LEAD FREE*	0886018	RK A7 T	⅝ - ¾	17 – 20
LEAD FREE*	0886009	RK 7/7C T	⅜ 7/7C	10
LEAD FREE*	0886007	LF RK 7R T	½ - 1	15 – 25
LEAD FREE*	0886006	LF RK 07S T	1½ - 2	40 – 50

Kit Includes: First and Second Check modules, O-rings and spacers if needed.

Series LFL7/L7



Kit for Valve LFL7/L7

	ORDER CODE	KIT NO.	SIZE in.	SIZE mm
LEAD FREE*	0886005	RK L7 T	¾ - 1	20 – 25

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.**

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