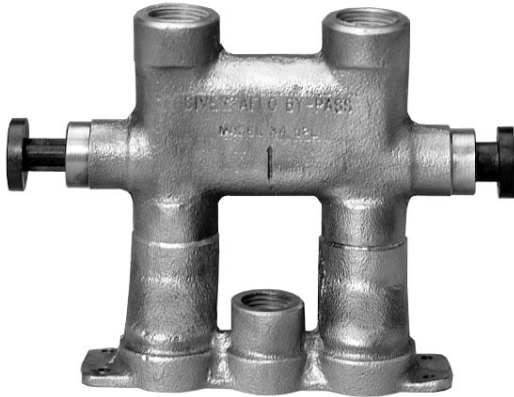


Series M9400 Valves

Brass Bypass Valve

"DIVERTAFLO"



1" copper sweat shown (P/N M9401)

Also available { 3/4" (20mm) copper sweat (P/N M9400)
3/4" (20mm) F.I.P. thread (P/N M9402)

- All valves offer a 1/2" (15mm) F.I.P. threaded drain port.
- All valves offered in the Custom Label series.
- Phillips pan head screws normally furnished with each valve.
- Screw mounting hole pattern is wider than on current fiber glass valves. This makes screw installation much easier.
- Plenty of finger room to install/tighten the regular brass mounting screws. Unlike present fiberglass valves, there is no necessity to furnish special carriage mounting bolts.

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.**

For use on
Autotrol Control Valves

SPECIAL FEATURES OF M9400 VALVES

- Rugged/durable brass bypass valve.
- Streamlined/compact/good looking.
- Dependable/very easy to operate/easy to service.
- Eliminates the need for a grounding strap.
- Maximum flow/great performance.
- Simplest valve available.
- Each valve has flow arrows plus "in" and "out" and "drain" markings cast into the body.
- Same performance as our regular Divertaflo valve series - push rods are interchangeable.
- Available in three valve models (3/4" (20mm) sweat, 3/4" (20mm) NPT and 1" (25mm) sweat piping).

Parts List		
Item Description	P/N	Qty. Per Valve
End cap, rod	44442	1
Push rod	44441	1
O-rings, valve	34443	2
Valve body, brass	(see styles below)	1
3/4" sweat	M400	—
1" sweat	M401	—
3/4" F.I.P.	M402	—
Nut, brass mtg. hex	65700-2	4
Screw, brass mtg. 3/4" (20mm)	65700-4	4
O-ring, large manifold	65831	2
O-ring, small manifold	65830	1

Hardware Kit (complete package for one valve - P/N 60034)
 * A complete valve push nut including four lubricated rings is available (P/N 4444)

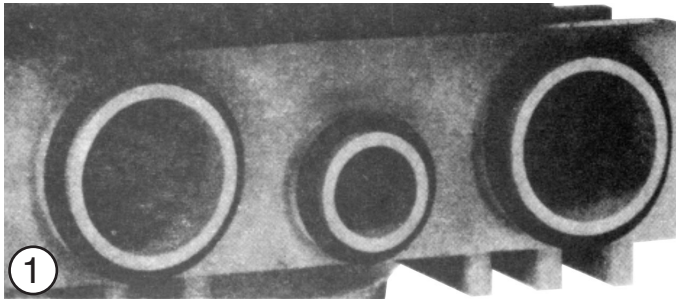


Installation Instructions

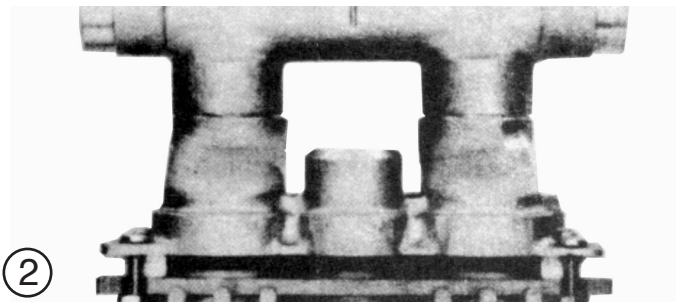
CAUTION:

When solder connections are being made, keep all heat away from all rubber, fiberglass or plastic parts. Carefully study all instructions on this sheet prior to starting the bypass valve installation. Follow the sequence here as you proceed with the installation.

- a) Remove the bypass valve push rod prior to making sweat connections to the bypass valve. Install pushrod and tighten screw on cap after the valve installation is complete and the valve is cool to the touch.
- b) Always use the small wooden spacer blocks provided to avoid exposing the control valve to any excess heat during any sweating (soldering) operations.
- c) Wooden spacer blocks, instructions and all necessary mounting hardware and packed in a single clear plastic bag and furnished with each valve. (Ref. our P/N 60034)



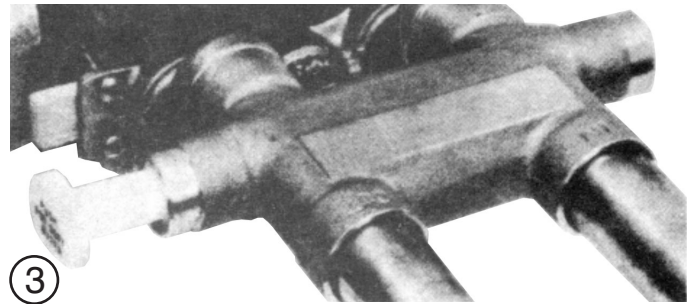
- Apply O-rings (3 req'd) to tank adapter.
- Always lubricate O-rings prior to installing bypass valve. Silicone spray, O-lube or vaseline may be used.
- Fully insert each O-ring so it is resting against molded ledge of the control valve as pictured in Figure 2.



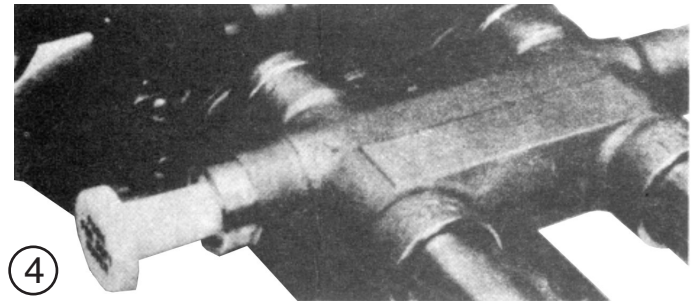
- When installed properly O-rings should be as pictured here.
- Install four brass mounting screws and nuts and tighten about as shown in the figure.
- Insert wooden spacer blocks by sliding between screws.
- If you prefer, spacer blocks may be turned to a vertical position placed just on the outside of the four mounting screws.

General Notes

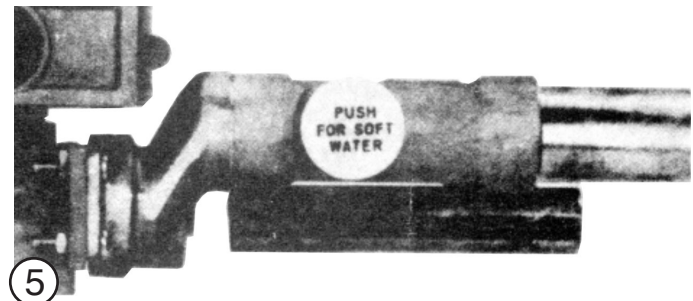
- If making sweat connection, always keep heat away from plastic items. Apply heat only in the immediate area of the brass as needed for soldering and try to minimize the time the valve is heated consistent with achieving a good solder joint.
- If no heating of the bypass valve is necessary, then there is no need to remove valve pushrod. Also the wooden blocks are not needed and may be discarded. For example certain valve models are intended expressly for threaded piping connections.
- When making the installation, be certain to leave slack in the inlet and outlet plumbing line connections to the by-pass valve. The softeners must not be supported by the plumbing connectors. Also, any stress created by piping connections may damage the fiberglass control valve.
- For bypass valve maintenance or service instructions, see "regular Divertaflo valve" service and installation instruction sheet.



- Once the wooden blocks are fully inserted then snug mounting screws, being careful to maintain approximate equal torque to each. Do not overtighten mounting screws at any time.
- After blocks are in place, then valve may be heated for sweating copper pipes. After valve cools, push rod can be re-inserted as shown.
- This figure shows 1" (25mm) copper piping installed.



- After valve cools to the touch, the wooden blocks may be removed. For easy removal it may be helpful to loosen screws slightly.
- Tighten each screw snugly but don't overtighten.
- The push rod may be installed from either side of valve body. Either way the valve will function properly.
- A complete installation would look like Figure 4 above or like Figure 5.



- This particular figure shows a complete installation using 1" copper "in" and "out" piping. Models available also for 3/4" (20mm) supply piping
- The drain connection on each valve is 1/2" (15mm) F.I.P. thread for easy installation.
- The figure above shows 1/2" (15mm) iron pipe for the drainline. (Use Teflon tape on all threaded connections.)

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