

# Series N35B Pressure Reducing Valves

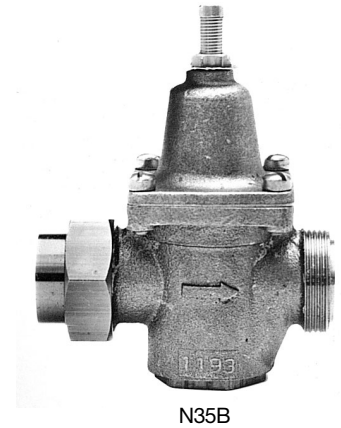
Sizes: 1/2" - 1" (15-25mm)

## Installation Instructions

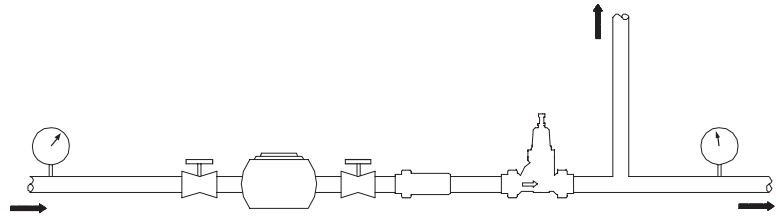
1. The valve should be installed by a licensed contractor in accordance with local codes and ordinances. This valve should be installed where it is accessible with sufficient clearance for cleaning, service, or adjustment.
2. Before installing the valve, be sure that the pipe ends are reamed and threads are cut to size.
3. Flush the lines to remove all loose scale, dirt and other foreign matter that can damage or clog the valve.
4. Install the regulator with the arrow on the body pointing in the direction of the flow.
5. Regulator may be installed vertically or horizontally (upright or inverted).
6. Start Up — Open cold water supply then hot water supply. Inspect for leaks.

**Note:** The valve should be inspected annually to assure maximum life and performance.

**Note:** N35B valves are suitable for outdoor or pit installations.

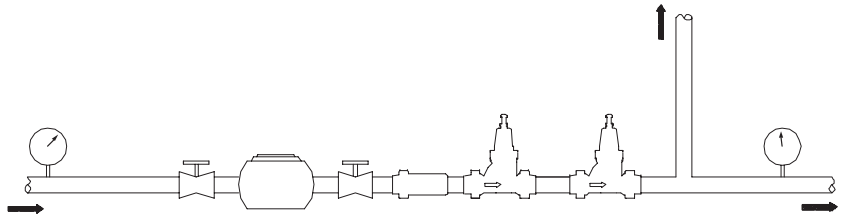


## Typical Installation



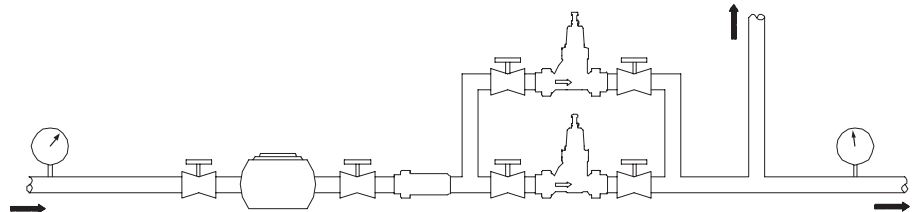
## Series Installation

Series installations are recommended where very high supply pressure must be reduced to a very low downstream pressure. Reducing the pressure in stages eliminates whistling and noise.



## Parallel Installation

Parallel installations are recommended where high flow or low flow demand is intermittent/occasional. They are also used for installations where service cannot be interrupted.



## Maintenance Instructions

- To clean strainer, shut off supply, remove bottom plug (4) and clean attached strainer.
- To replace seat disc or diaphragm loosen locknut (51) and back off adjusting screw (53), remove four bonnet screws (24) and lift off cage (3) with spring (729) and washer (61).
- Hold stem (27) on wrench flats and remove nut (51), lock washer (46), diaphragm plate (60) and diaphragm.
- Use 1 1/8" socket to unscrew seat module, inspect for nicks, cuts or damage, hold module upside down and use wrench on stem (27) wrench flats and screwdriver on disc holder (47) to disassemble.
- Use care to avoid dropping poly spacer (7) and bypass ball (106). Lubricate O-rings 103 and 101 with Dow Corning 111 or equivalent before reassembling.

## Adjustment

Regulator is factory preset to 50psi. (346 kPa) To adjust pressure setting, loosen the lock nut and turn the adjusting bolt clockwise to increase pressure, counterclockwise to decrease pressure.

**Caution:** Any time a reducing valve is adjusted, the use of a pressure gauge is recommended to verify correct pressure setting.

## Bypass Feature\*

This regulator has a built-in thermal expansion bypass feature. This feature prevents downstream pressure from rising to more than 10psi above the supply pressure.

\***Note:** The bypass feature will not prevent the pressure relief valve from opening on the hot water supply system with pressure above 150psi (10.3 bar).

## Troubleshooting

**High System Pressure:** If the downstream system pressure is higher than the set pressure under no flow conditions, the cause could be thermal expansion, pressure creep or dirt/debris on the seat.

Thermal expansion occurs whenever water is heated in a closed system. The system is closed when supply pressure exceeds 150psi (10.3 bar), or a check valve or backflow preventer is installed in the supply piping.



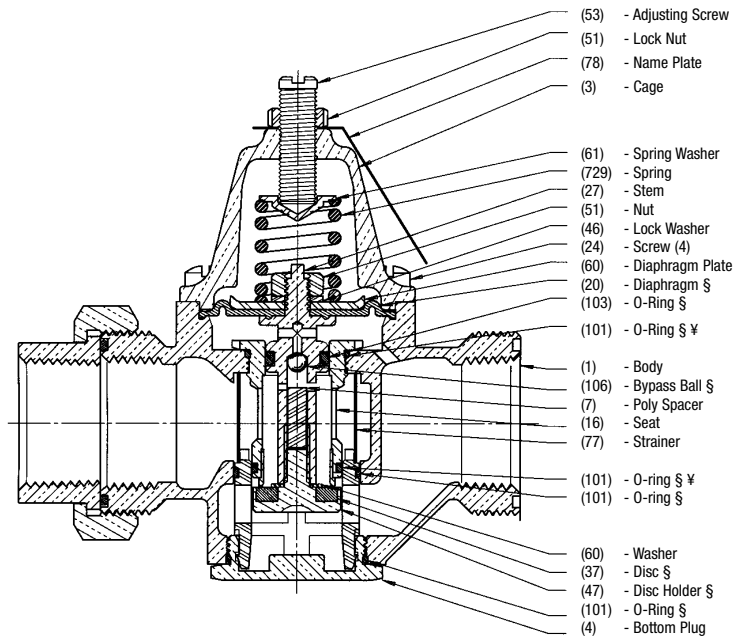
Watts 276H300

You must make provisions for pressure relief protection of your plumbing system and components. The use of a relief valve such as the Watts 530C, BRV, Governor 80, or 3L or potable water expansion tank such as the Watts DET, PLT or DETA 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.

## Troubleshooting (Cont.)

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.



## Repair Kits

ORDERING CODE	KIT NO.	SIZE (DN)		CONTENTS
		In.	mm	
0006849	N35B-RK	1/2", 3/4", 1"	15, 20, 25	Rubber Parts \$
0006804	N35B-SRK	1/2", 3/4", 1"	15, 20, 25	Seat, O-rings ¥

### When Ordering, Specify:

- Ordering Code
- Size of Valve
- Type Number
- Model shown on Nameplate

### 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](http://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.

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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.

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