-SINCE 1930-
HOLBY TEMPERING VALVE
AN AUTOMATIC
ALL BRONZE
THERMOSTATICALLY OPERATED
WATER BLENDING DEVICE

APPROVED
by the
ANSI / AMERICAN SOCIETY
OF SANITARY ENGINEERING
STANDARD No. 1017

APPROVED
by the
BOARD OF STANDARDS AND APPEALS
CITY OF NEW YORK
CAL. #578 - 48 - SM

DISTRIBUTED BY
PLUMBING and HEATING SUPPLIERS

HOLBY VALVE INC.
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U.S.A.
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FAX (973) 465-7475
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GUARANTY
We guarantee each new HOLBY TEMPERING VALVE to be free from defects in material and workmanship for a period of one year from date of installation. Any HOLBY TEMPERING VALVE or part, returned to us carriage prepaid, will be repaired or replaced without charge if found defective upon our examinations. All carriage charges to be paid by the customer.

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SIZE A B C D * E F G

MIXED HOT COLD WEIGHTS

OUTLET INLET INLET

1/2" 4-1/4" 8" 3-1/4" 6" 1/2" 1/2" 1/2" 7 lbs.
3/4" 4-1/4" 8" 3-1/4" 6" 3/4" 3/4" 3/4" 7 lbs.
1" 4-1/4" 11-1/4" 4-1/4" 12" 1" 1" 1" 8 lbs.
1-1/4" 4-3/4" 19" 4-1/2" 15" 1-1/4" 1-1/4" 1" 14 lbs.
1-1/2" 5-1/2" 23" 5" 20" 1-1/2" 1-1/2" 1-1/4" 18 lbs.
2" 6-3/8" 25" 6" 20" 2" 2" 1-1/2" 27 lbs.
2-1/2" 7-1/2" 27-3/4" 6-1/2" 24" 2-1/2" 2-1/2" 2" 42 lbs.
3" 9" 29-1/8" 7" 24" 3" 3" 2-1/2" 63 lbs.
4" 10-1/4" 31" 8" 24" 4" 4" 4" 97 lbs.

* Note: "D" is clearance required for adjusting and servicing

STANDARD PIPE TAP
HOLBY TEMPERING VALVE

APPLICATION
The HOLBY TEMPERING VALVE is a temperature regulating valve, designed to be used as a master, zone, fixture or individual appliance regulator to control the predetermined temperature of hot water. Water delivered from hot water generating equipment such as boilers, heat exchangers, submerged coils, or any other source is frequently too hot or scalding. This condition can be corrected by the installation of a HOLBY TEMPERING VALVE.

The HOLBY TEMPERING VALVE is also used in regulating temperatures of engines, heating systems, compressors, cooling towers, processing machinery and many other applications. The HOLBY TEMPERING VALVE IS NOT AN ANTI-SCALD VALVE.

DESCRIPTION
The HOLBY TEMPERING VALVE is rugged, constructed entirely of bronze and copper and hydrostatically tested to a pressure of 300 psig. It has the following features:

1. A long mixing chamber with vanes at an angle to the longitudinal axis of the valve which provides thorough mixing of the hot and cold water.
2. The thermostatic element is placed inside the body of the valve where the hot and cold water mix. It is immediately sensitive to any change in water temperature and makes proper corrections by opening or closing the hot and cold water inlets in the valve.
3. A long thermostatic element provides fifteen to twenty times the number of corrugations found in the usual short thermostat. Thus, the total expansion is divided over these numerous corrugations, so that the flexing of each is reduced to mere thousandths of an inch resulting in long life of the instrument.
4. The action of the thermostatic element moves a piston over the hot and cold water openings, opening the cold as it reduces the opening of the hot, thus uniformly blending the hot and cold water, producing an even temperature of the delivered water without any change in volume. This action eliminates the building up of temperature in circulating systems at times when little or no hot water is being used.
5. Large hot and cold water passages result in very low pressure drop through the valve.

INSTALLATION
The HOLBY TEMPERING VALVE will operate satisfactorily when installed in any position. Valve installation must follow the HOLBY basic piping diagrams. The adjusting screw end of the valve should not be placed against, nor in-line with any other fixed object for a (minimum) space of twenty-four inches. This clearance is required for service access to the internal valve parts. Warranty is only valid for proper installations.

SERVICE and MAINTENANCE
The HOLBY TEMPERING VALVE should be opened, inspected and cleaned within one year of initial installation. A routine inspection and service schedule should be implemented depending on the system water quality.

TEMPERATURE RANGE
The HOLBY TEMPERING VALVE can be adjusted to deliver water within close tolerances of any temperature from 120° to 200° Fahrenheit provided that the hot water supplied to the valve is of a higher temperature than that for which the valve is set. Higher or lower temperature ranges are available on special order. For outlet temperatures below 120° Fahrenheit, please specify for low temperature operation.

REGULATION
The temperature of the water delivered by the HOLBY TEMPERING VALVE can be changed by turning the adjusting screw clockwise for lower temperatures and counter-clockwise for higher temperatures. To facilitate adjustment a thermometer should be placed in the outlet line as shown in the diagram and water should be flowing through the HOLBY TEMPERING VALVE while adjustments are being made.

FUNCTIONS
1. To mix hot and cold water and control the mixed water temperature within close tolerances between 120° and 200° Fahrenheit. Other temperature ranges are available upon request.
2. To prevent elevated hot water temperatures during off-peak periods. As hot water enters the HOLBY TEMPERING VALVE the thermostat closes the hot water inlet and opens the cold water inlet allowing hot water re-circulation flow through the HOLBY TEMPERING VALVE thus controlling the rate of re-circulation to the hot water supply line.
3. To increase the capacity of water heating systems by automatically introducing cold water to the hot water lines and delivering a blended mixture at the desired temperature.
4. To deliver water at different temperatures to various locations from one hot water source.
HOLBY TEMPERATURE REGULATING VALVE-TYPICAL INSTALLATIONS
Constantly Updated & Improved Since 1930

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PIPING DIAGRAMS FOR OTHER USES AND APPLICATIONS AVAILABLE ON REQUEST

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