

Series USG-B Under Sink Guardian™

Installation Instructions

IS-USG-B

Description

The Watts 3/8" compression fitting thermostatic mixing valve maintains and limits hot water to desired selectable temperature between 80°F and 120°F (27°C and 49°C) and with flow rates as low as 0.5 gpm (1.9 lpm) and as high as 2.5 gpm (9.5 lpm). The mixing valve is listed to ASSE Standard 1016 for single fixture applications. The USG-B series uses a double throttling design to control both the hot and cold water supply to the mixed outlet. The superior flow characteristics of this valve provides accurate temperature control ($\pm 3^{\circ}\text{F}$) with low pressure drop. As an added feature, the USG-B incorporates dual check valves to protect against cross-flow. A cap is provided for three port application.

Temperature Adjustment

1. Loosen the cap screw with the hex wrench provided.
2. As a safety feature the cap must be partially lifted from the valve to adjust temperature.
3. With the faucet turned on and in the full hot position, adjust the setting of the valve to obtain the desired outlet water temperature. Turn clockwise to decrease temperature.
4. Lower handle and tighten screw.
5. Check outlet temperature.

Note: The hot water should be allowed to flow for two or three minutes prior to adjusting the valve setting in order to have the hottest inlet temperature flowing through the valve.

Applications

The unit is intended for under sink installation to control the hot water temperature and prevent accidental scalding. The water temperature must be adjusted by the installer using a thermometer to measure the hot water temperature at the faucet outlet. Maximum temperature of 110°F (43°C) is recommended.

Application Note

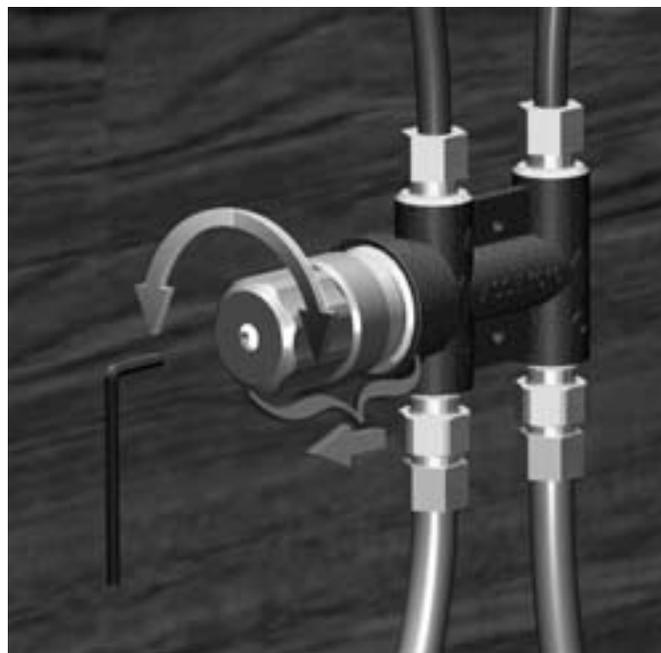
Delivery of water to fixtures intended for use in bathing or washing should always be controlled by valves listed to ASSE Standard 1016 or ASSE Standard 1070 such as Watts Series USG, MMV or L111 mixing valves.

These valves provide the user with both scald protection and protection from thermal shock. These valves should always be adjusted after installation to desired temperature.



ASSE 1016 Listed

U.S. Pat. 6,315,209



Temperature Adjustment

USG-B shown with optional inlet strainers.

Pressure - Temperature

Minimum supply pressure: 30psi (207kPa)
 Hot inlet temperature: 120°F-180°F (49°C-82°C)
 Cold inlet temperature: 40°F-85°F (4°C-29°C)
 Minimum inlet temperature differential: 15°F (9°C)
 (Hot inlet and mixed outlet)
 Temperature out: 80°F-120°F (27°C-49°C)
 Maximum pressure: 150psi (10.34 bar)
 Pressure differential between hot and cold inlet supplies must be less than 20% between them.

Approval: CSA B-125

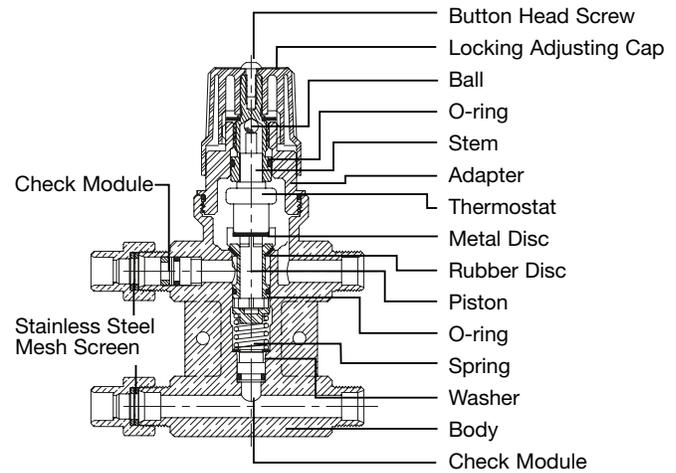
Listing: ASSE 1016



Accessories

3/8" Strainer - 20x20 Mesh Stainless Steel Screen
 Ordering Code: 0204090

Basic Construction



Typical Installations

Two Handle Faucet

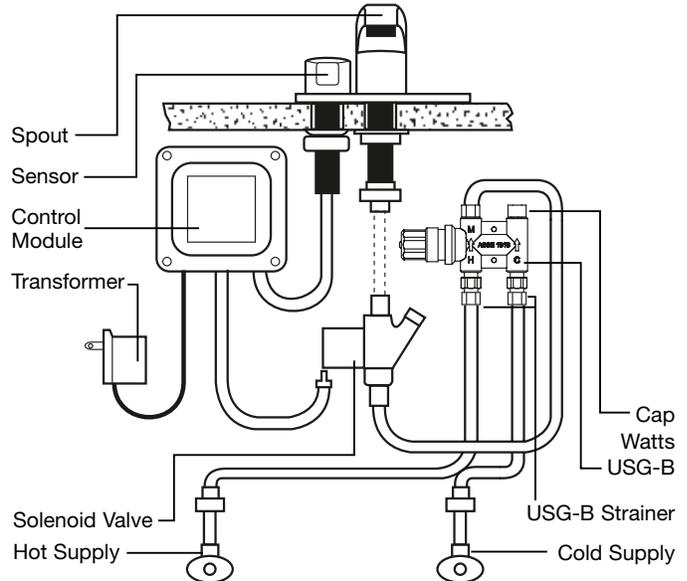


The Watts Model USG-B Under Sink Guardian installs easily onto most faucets.

- Shut off supply valves and remove existing piping to faucet.
- Connect the USG-B to the supply valves and the faucet.
- Turn on the supply valves.

Note: When using copper tubing, tubing should not extend more than 3/16" beyond the compression ferrule.

Sensor Faucet



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



USA: 815 Chestnut St., No., Andover, MA 01845-6098; www.wattsreg.com
 Canada: 5435 North Service Rd., Burlington, ONT, L7L 5H7; www.wattscanada.ca



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For Residential and Commercial Applications

Job Name _____ Contractor _____
 Job Location _____ Approval _____
 Engineer _____ Contractor's P.O. No. _____
 Approval _____ Representative _____

Series **USG-B** Under Sink Guardian™

Series USG-B Under Sink Guardian™ 3/8" (10mm) compression fitting thermostatic mixing valves maintain and limit hot water to desired selectable temperature between 80°F and 120°F (27°C and 49°C) with flow rates as low as 0.5 gpm (1.9 lpm) and as high as 2.5 gpm (9.5 lpm). The mixing valve is listed to ASSE Standard 1016 for single fixture applications. The USG-B series uses a double throttling design to control both the hot and cold water supply to the mixed outlet. The superior flow characteristics of this valve provide accurate temperature control ($\pm 3^\circ\text{F}$) with low pressure drop. As an added feature, the USG-B incorporates dual check valves to protect against cross-flow.

Features

- Maintains mixed water temperature to $\pm 3^\circ\text{F}$ up to 120°F (49°C).
- Installs easily between the stop valves and faucet
- Includes tamper resistant locking cap to prevent accidental mis-adjustment.
- Built-in check valves prevent migration of hot water to cold and cold water to hot water piping.
- Provided with cap for three port application.

Applications

The unit is intended for under sink installation to control the hot water temperature and prevent accidental scalding. The water temperature must be adjusted by the installer using a thermometer to measure the hot water temperature at the faucet outlet. Maximum temperature of 110°F (43°C) is recommended.

Specifications

A Thermostatic Mixing Valve shall be installed on the hot water supply to the fixture. The valve shall be ASSE Standard 1016 listed and control the temperature of the hot water. It shall have a bronze body and shall include integral check valves and an adjustment cap with locking feature. The valve shall be provided with 3/8" (10mm) male compression fittings. The valve shall be Watts Regulator Company Series USG-B.

For optional strainer specify USG Strainer – 3/8" male compression x 3/8" female thread, 20x20 mesh stainless steel screen.

For satin chrome finish specify – SC



USG-B

ASSE 1016 Listed

U.S. Pat. 6,315,209

Application Note

Delivery of water to fixtures intended for use in bathing or washing should always be controlled by valves listed to ASSE Standard 1016 or ASSE Standard 1070 such as Watts Series USG, MMV or L111 mixing valves.

These valves provide the user with both scald protection and protection from thermal shock.

The installer should always test to verify temperature setting after installation.

Materials

Body: Bronze	Rubber Disc: Buna-N
Metal Disc: Stainless steel	O-rings: Buna-N
Spring: Stainless steel	Piston: UDEL-P1700
Ball: Stainless steel	Gasket: Garlock 3000
Thermostat: Copper	



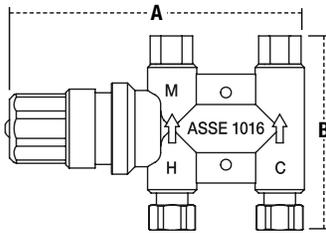
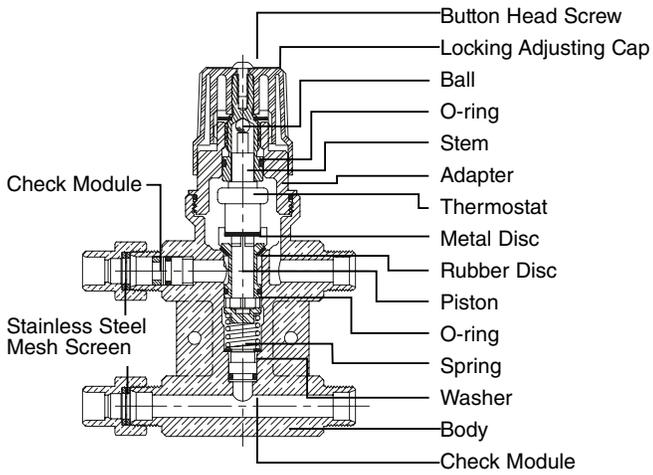
Approval: CSA B-125

Listing: ASSE 1016

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Basic Construction



Pressure – Temperature

Minimum supply pressure: 30psi (207 kPa)

Hot inlet temperature: 120°F-180°F (49°C-82°C)

Cold inlet temperature: 40°F-85°F (4°C-29°C)

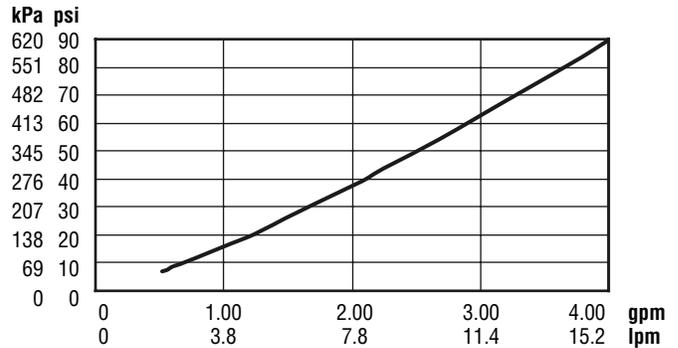
Minimum inlet temperature differential: 15°F (9°C)

Temperature out: 80°F-120°F (27°C-49°C)

Maximum pressure: 150psi (10.34 bar)

Pressure differential between hot and cold inlet supplies must be less than 20% between them.

Flow Capacity 3/8" USG-B



Dimensions – Weights

Models	Size	A		B		Weight	
		in.	mm	in.	mm	lbs.	kgs.
USG-B	3/8" Comp.	5 3/16	132	3 1/8	79	1.5	.68
USG-B-SC*	3/8" Comp.	5 3/16	132	3 1/8	79	1.5	.68
USG-B-Strainer†	3/8" Comp.	5 3/16	132	3 1/8	79	1.5	.68
USG-B-SC-Strainer*†	3/8" Comp.	5 3/16	132	3 1/8	79	1.5	.68

* SC – Satin Chrome Finish

† Strainer – Includes two inlet strainers

Accessories

3/8" Strainer - 20x20 Mesh Stainless Steel Screen

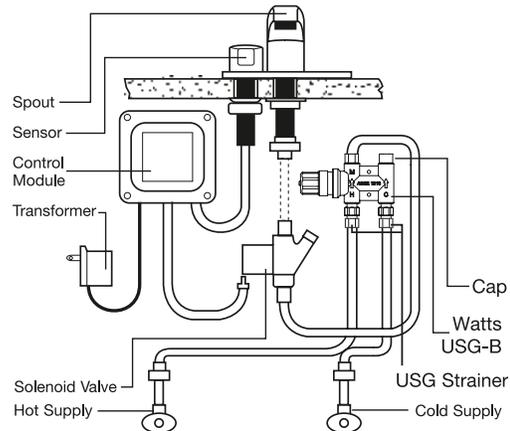
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Typical Installations

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