

SinkMixer™ Scald Protection Thermostatic mixing valve



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Application

The Caleffi SinkMixer™ provides water at a safe and usable temperature in situations where the control of the temperature of the water discharging from a terminal fixture is of the utmost importance, i.e. within hospitals, schools, nursing homes, etc. The SinkMixer is used in under sink and under counter applications where the user must be protected from the danger of scalding caused by hot water.

The valve is designed to prevent the flow of water discharging from the mixed water outlet in the event of the failure of hot or cold supply. The compact design provided with mounting bracket allows for easy installation. The cold water outlet to the fixture eliminates the need for additional piping and tee used with three-port mixing valves. For single-pipe fixtures (tempered water only), code 521201AP includes a plug for the valve cold outlet port and copper compression fittings kit for hard pipe installs. The valve is complete with check valves on the hot and cold inlets and meets certification requirements for the Low Lead Plumbing Laws and NSF/ANSI/CAN 61 by ICC-ES, ASSE 1070 listed (temperature cannot exceed 120°F).

Typical Specification

Furnish and install on the plans described herein, a SinkMixer™ scald protection point of use four port thermostatic mixing valve as manufactured by Caleffi. Each mixing valve must be designed with a forged low-lead brass body, AISI 302 stainless steel spring, AISI 304 stainless steel hot inlet strainers, seals in peroxide-cured EPDM, and polysulphone shutter. Each valve must also be designed for ±3°F (±2°C) temperature stability with a tamper proof setting lock to lock the temperature at the set value. Provided with inlet port check valves and strainers. The valve shall be ASSE 1070 approved for point of use installation. Forged low-lead brass body (<0.25% Lead content) shall be certified by ICC-ES, file 1360. Meets requirements of ANSI/NSF 372 and NSF/ANSI/CAN 61. Each valve shall be Caleffi model 521201A or approved equal. Model 521202AP includes plug/nut for cold water outlet port and copper compression fittings kit. (See product instructions for specific installation information.)

Use

NSF/ANSI/CAN 61



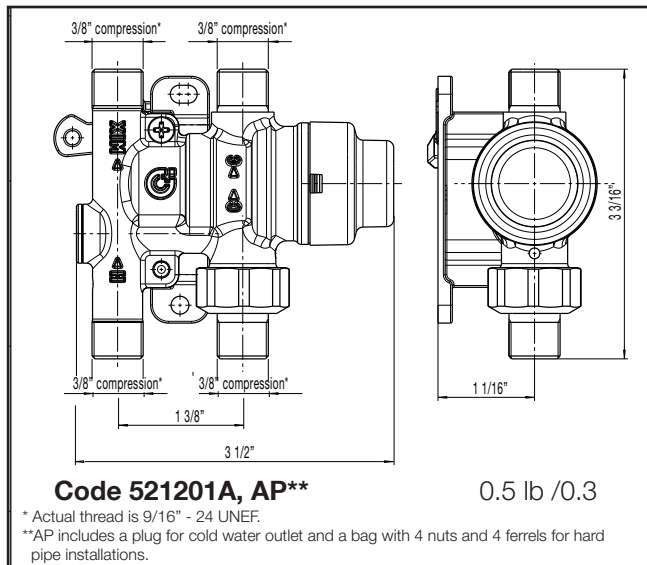
The Caleffi SinkMixer anti-scald thermostatic mixing valve is intended for use in under sink and under counter applications in accordance with installation rules and indications specified in ASSE 1070 standards. The SinkMixer is used to prevent accidental scalding with the outlet water temperature properly adjusted using a thermometer at the faucet to measure the desired temperature.

Technical specifications

Materials:

Valve body, regulating spindle, spring holder, cold inlet union nut:	forged low-lead brass (< 0.25% lead content)
Internal shutter:	polysulfone
Hot inlet strainer:	AISI 304 stainless steel
Spring:	AISI 302 stainless steel
Seals:	Peroxide-cured EPDM
Cover:	ABS white
Mounting bracket and adjustment key:	Polyamide Nylon

Dimensions



Code 521201A, AP** 0.5 lb / 0.3
 * Actual thread is 9/16" - 24 UNEF.
 **AP includes a plug for cold water outlet and a bag with 4 nuts and 4 ferrules for hard pipe installations.

Performance
 Temperature adjustment range: 95–120°F (35–50°C)
 Temperature set: must be commissioned on site to achieve desired temperature
 Temperature stability: ±3°F (±2°C)
 Cold inlet temperature: Minimum 39°F (4°C); Maximum 85°F (29°C)
 Factory Setting: 113°F (45°C)
 Hot inlet temperature: Minimum 120°F (49°C); Maximum 195°F (90°C)
 Maximum operating differential pressure:
 Static: 150 psi (10 bar); Dynamic: 70 psi (5 bar)
 Minimum operating differential pressure (dynamic): 1.5 psi (0.1 bar)
 Maximum unbalanced dynamic supply (hot/cold or cold/hot): 2:1
 Minimum temperature differential between hot water inlet and mixed water outlet to ensure thermal shutoff function: 18°F (10°C)
 Minimum temperature differential between mixed water outlet and cold water inlet to ensure stable operation: 9°F (5°C)
 Flow coefficient: Cv =0.52 (Kv=0.45)
 Minimum flow rate for optimum operation: 0.35 gpm (1.3 l/min)
 Maximum flow rate for optimum operation: 2.3 gpm (8.5 l/min)

Connections
 Main connections: 3/8" compression

Certifications
 1. ASSE 1070/CSA B125.3-2012, certified by ICC-ES, file PMG-1358.
 2. NSF/ANSI 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, certified by ICC-ES, file PMG-1360.
 3. NSF/ANSI/CAN 61-2018, Drinking Water System Components –Health Effects, certified by ICC-ES, file PMG-1512.
 4. Complies with codes IPC, IRC, UPC and NPC.

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system

Job name _____	Size _____
Job location _____	Quantity _____
Engineer _____	Approval _____
Mechanical contractor _____	Service _____
Contractor's P.O. No. _____	Tag No. _____
Representative _____	Notes _____