# SinkMixer™ Scald Protection
# Thermostatic mixing valve, 3-port

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## Application

The Caleffi SinkMixer™ thermostatic mixing valve ensures that end users are safeguarded against scalding water temperature conditions in applications such as sinks, bathtubs or lavatories. The SinkMixer is most critical in hospitals, schools, and nursing homes, where precise water temperature control is essential for the safety of vulnerable individuals. In accordance with American and Canadian product safety standards, the valve functions to control and limit the mixed outlet water temperature up to 120 ºF. In the event of cold water supply failure the valve will rapidly reduce outlet flow to prevent against scalding conditions from fluctuating hot water supply conditions. The SinkMixer is equipped with integral check valves on both supply inlets to prevent against cross flow conditions.The 3-port compact configuration is designed with single-pipe installations in mind where only a singular tempered water is supplied to the fixture, and includes a compression fitting kit for hard pipe applications.

The Caleffi SinkMixer family complies with ASSE 1070/ASME A112.1070/CSA B125.70 performance requirements for water temperature limiting devices. Certified and listed by ICC-ES, PMG File 1358. Complies with low lead and lead free material requirements of NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372 for use in potable water systems. Certified and listed by ICC-ES, PMG File 1512 and PMG File 1360 respectively. Certified for installation and use in compliance with UPC, IPC, NRC, and NPC plumbing codes. Certified and listed by ICC-ES, PMG File 1358.

**ASSE 1070**
**NSF/ANSI/CAN 61**
**NSF/ANSI/CAN 372**

## Typical Specification

Furnish and install on the plans described herein, a SinkMixer™ scald protection point of use 3-port thermostatic mxing 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 /ASME A112.1070/CSA B125.70 approved for point of use installations 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/CAN 61 and NSF/ANSI/CAN 372. Each valve shall be Caleffi model 521204A or approved equal. (See product instructions for specific installation information)

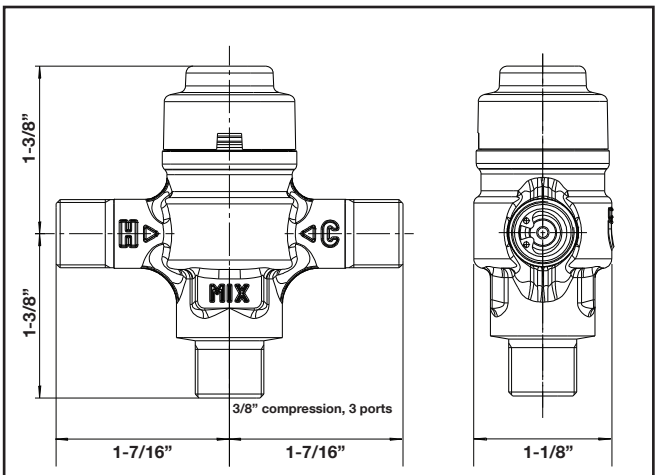
## Technical specifications

**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 |

*Meets the "lead free" requirement of Section 1417 of the Safe Drinking Water Act (SDWA). This product has a weighted average lead content of less than 0.25% for its wetted surfaces contacted with consumable water.

## Dimensions




**Code 521204A** 0.5 lb /0.3 kg

Actual thread is 9/16" - 24 UNEF.
521204A package includes a bag with 3 nuts and 3 ferrules.

## 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 coeffiicient: | 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/ASME A112.1070/CSA B125.70, CSA B125.3, UPC, IPC, IRC and NPC compliance for use in accordance with U.S. and Canadian plumbing codes. Certified and listed by ICC-ES, PMG File 1358.
2. NSF/ANSI/CAN 61, Drinking Water System Components for use in potable water systems. Certified by ICC-ES, PMG File 1512.
3. NSF/ANSI/CAN 372, US and Canadian Low-Lead and Lead-Free materials contents laws for drinking water system components. Certified by ICC-ES, PMG File 1360.



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

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