

TubMixer™

High Flow Scald-Protection Thermostatic Mixing Valves

5213 series



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Application

Thermostatic mixing valves are used in applications where the user must be protected from the danger of scalding caused by hot water. The Caleffi TubMixer™ 5213 series 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 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 TubMixer is an adjustable high-flow point-of-use thermostatic mixing valve for Roman Tubs and other high flow fixtures. Wide flow ranges from 0.5 GPM for one fixture up to 9 GPM for higher demands. It meets certification requirements for ASSE 1070, ASME A112.1070, CSA B125.70, CSA B125.3, and NSF/ANSI/CAN 372 as certified by ICC-ES (temperature cannot exceed 120°F). The valve is complete with check valve at both hot and cold inlets. It meets codes IPC, UPC, IRC, NPC for use in accordance with the US and Canadian plumbing codes.

Typical Specification

Furnish and install on the plans described herein, a three-way thermostatic mixing valve as manufactured by Caleffi. Each mixing valve must be designed with a low-lead brass body and regulating spindle, PPO shutter, seats and slide guides with integral inlet port check valves, stainless steel springs and seals in peroxide-cured EPDM. Each valve must also be designed for ±3° F (±2° C) temperature stability with a tamper proof control knob to lock the temperature at the set value. The valve shall be ASSE 1070 approved for point of use installation. Low-lead brass body (<0.25% Lead content) certified by ICC-ES, file 1360. Complies with requirements of NSF/ANSI/CAN 372. Each valve shall be Caleffi model 5213 or approved equal. (See product instructions for specific installation information.)

Technical specifications Materials



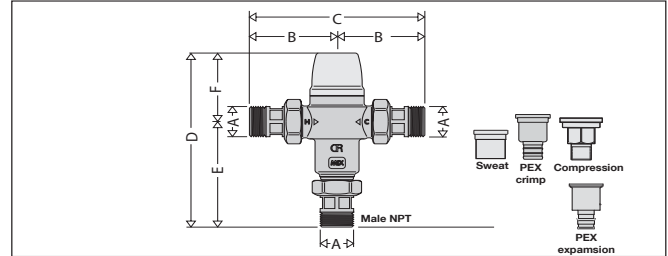
NSF/ANSI/CAN 372

Body: low-lead cast brass (<0.25% lead content)
 Regulating spindle: low-lead cast brass (<0.25% lead content)
 Internal shutter: PPO
 Sealing elements: peroxide-cured EPDM
 Cover: ABS

Performance

Suitable fluids: water
 Maximum working pressure (static): 150 psi (10 bar)
 Maximum working pressure (dynamic): 70 psi (4.8 bar)
 Minimum working pressure (dynamic): 1.5 psi (0.1 bar)
 Temperature adjustment range: 85°F to 120°F (30°C to 50°C)
 Temperature set: must be commissioned on site to achieve desired temperature setting
 Temperature control accuracy: ±3°F (±2°C)
 Minimum cold inlet temperature: 39°F (4°C)
 Maximum cold inlet temperature: 85°F (29°C)
 Minimum hot inlet temperature: 120°F (49°C)
 Maximum hot inlet temperature: 185°F (85°C)
 Maximum unbalanced dynamic supply (hot/cold or cold/hot): 6:1

Dimensions



Code	A	B	C	D	E	F	Wt (lb)
521342A	½" MNPT	2 13/16"	5 11/16"	4 5/16"	3"	1 15/16"	2.0
521352A	¾" MNPT	2 13/16"	5 11/16"	4 5/16"	3"	1 15/16"	2.0
521362A	1" MNPT	2 15/16"	5 7/8"	5 3/16"	3 ¼"	1 15/16"	2.0
521347A	½" PEX crimp	3"	6"	5 ½"	3 5/8"	1 15/16"	2.0
521357A	¾" PEX crimp	3"	6"	5 ½"	3 5/8"	1 15/16"	2.0
521367A	1" PEX crimp	3 1/16"	6 1/8"	5 9/16"	3 11/16"	1 15/16"	2.0
521348A	½" PEX exp	3 1/8"	6 ¼"	4 5/8"	2 11/16"	1 15/16"	2.0
521358A	¾" PEX exp	3 ¾"	7 ½"	5 3/8"	3 7/16"	1 15/16"	2.0
521368A	1" PEX exp	4 1/16"	8 1/8"	6 1/16"	4 1/8"	1 15/16"	2.0
521349A	½" sweat	2 11/16"	5 7/16"	4 5/8"	2 11/16"	1 15/16"	2.0
521359A	¾" sweat	2 7/8"	5 ¾"	4 13/16"	2 15/16"	1 15/16"	2.0
521369A	1" sweat	3 1/8"	5 5/16"	5 3/8"	3 ¼"	1 15/16"	2.0
521333A*	¾" comp	2 11/16"	5 3/8"	5 3/16"	3 5/16"	1 15/16"	2.0

*includes mounting bracket.

Minimum temperature differential between hot water inlet and mixed water outlet to ensure thermal shutoff operation: 18°F (10°C)
 Minimum temperature differential between mixed water outlet and cold water inlet to ensure stable operation: 9°F (5°C)
 Minimum flow rate for stable operation: 0.5 gpm (2 l/min)
 Maximum flow rate for stable operation: 9 gpm (34 l/min)
 Flow rating: Cv: 2.0 (Kv: 1.7 m³/hr)

Connections

Main connections: ½", ¾", 1" union PEX crimp, PEX expansion, NPT male and sweat ¾" union compression

Certifications

- Complies with codes IPC, UPC, IRC, NPC, ICC-ES certified to ASSE 1070, ASME A112.1070, CSA B125.70, CSA B125.3, as certified by ICC-ES, file PMG-1358.
- Complies with NSF/ANSI/CAN 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, as certified by ICC-ES, file PMG-1360.

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 _____
 Job location _____
 Engineer _____
 Mechanical contractor _____
 Contractor's P.O. No. _____
 Representative _____

Size _____
 Quantity _____
 Approval _____
 Service _____
 Tag No. _____
 Notes _____