



AngleMix™ Angle-style three-way thermostatic mixing valve

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Application

The Caleffi AngleMix™ 520 series thermostatic mixing valve is used in systems producing domestic hot water and easily mounts to the top of water heaters. The mixed temperature outlet is inline with the hot water inlet, facilitating trouble-free connection and reducing space required for installation. The AngleMix maintains the desired output temperature of the mixed water supplied at a constant set value compensating for both temperature and pressure fluctuations of the incoming hot and cold water. The mixing valve also features a thermal shut-off function that operates in the event of a cold water supply failure at the inlet. Also available as body only, for a wide variety of separately-ordered end connections, the angle style body design offers improved fluid dynamics for better performance and reduces installation labor and materials, eliminating a piping elbow in typical installations. The valve has been specifically certified to ASSE 1017 and Low Lead Plumbing Law by ICC-ES.

Typical Specification

Furnish and install on the plans described herein, an AngleMix™ angle-style three-way thermostatic mixing valve as manufactured by Caleffi. Each mixing valve must be designed with a DZR low-lead brass body, stainless steel springs, seals in peroxide-cured EPDM, and shutter, seats and sliding guides in anti-scale plastic, PSU. Each valve must also be designed for $\pm 3^{\circ}\text{F}$ ($\pm 2^{\circ}\text{C}$) temperature stability with a tamper proof control knob to lock the temperature at the set value, and mixed outlet temperature gauge. Provide with inlet port check valves, AC models. The valve shall be ASSE 1017 approved for point of distribution installation. DZR low-lead brass body (<0.25% Lead content) shall be certified by ICC-ES, file 1360. Meets requirements of ANSI/NSF 372-2011. Each valve shall be Caleffi model 5205 or approved equal. (See product instructions for specific installation information.)



Technical specifications

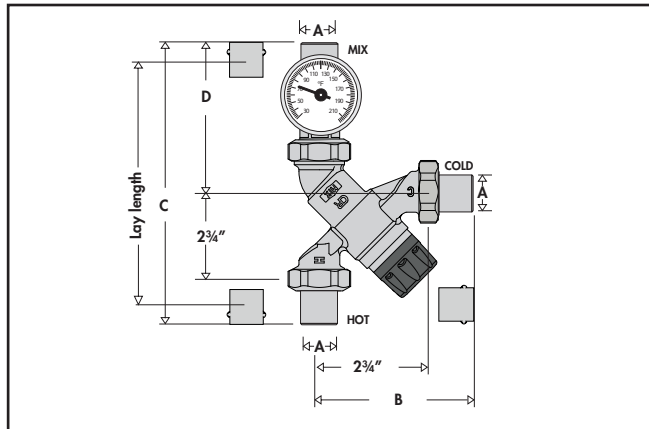
Materials

- Valve body: DZR low-lead brass
- Shutter, seats and slide guides: PSU
- Springs: stainless steel
- Seals: peroxide-cured EPDM
- Adjustment knob: ABS

Performance

- Suitable fluids: water
- Setting range: 95–150° F (35–65° C)
- Tolerance: $\pm 3^{\circ}\text{F}$ ($\pm 2^{\circ}\text{C}$)
- Max. working pressure (static): 150 psi (10 bar)
- Max. working pressure (dynamic): 75 psi (5 bar)
- Max. hot water inlet temperature: 195° F (90° C)
- Max. inlet pressure ratio (H/C or C/H) for optimal performance: 2:1

Dimensions



Code	A	B	C	D	Wt. (lb.)
520516A	3/4" press	4"	8"	4 13/16"	2.8
520516AC	3/4" press with inlet checks	4"	11 1/2"	6 3/4"	2.8
520519A	3/4" sweat	4"	7 1/2"	4 7/16"	2.8
520519AC	3/4" press with inlet checks	4"	10"	6 1/2"	2.8

Lay length (hot inlet to mix outlet) for press: 5 5/16"; for sweat: 5 9/16".

Minimum temperature difference between hot water inlet and mixed water outlet for optimal performance:

18° F (10° C)

Minimum flow to ensure optimal performance:

0.5 gpm (2 L/min)

Mixed outlet temperature gauge:

2" diameter

Scale from 30° F to 210° F

Certifications

1. ASSE 1017/CSA B125.3, certified by ICC-ES, file PMG-1357.
2. NSF/ANSI 372-2011, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction of Lead in Drinking Water Act, certified by ICC-ES, file PMG-1360.

Connections

- sweat union: 3/4"
- press union: 3/4"

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 _____