# **Three-Way Thermostatic Mixing Valve Point of Distribution**

521 Series

Submittal Data 02902 NA - Issue Date 04/2010

# CALEFFI

# **Application**

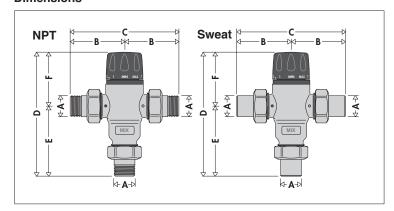
The thermostatic mixer is used in systems producing domestic hot water or in radiant panels heating systems. Its function is to maintain the temperature of the mixed water supplied to the user constant at the set value when there are variations in the supply conditions of the incoming hot and cold water. The valve has been specifically certified to ASSE 1017.



## **Typical Specification**

Furnish and install on the plans described herein, a Caleffi Three-Way Thermostatic Mixing Valve as manufactured by Caleffi. Each mixing valve must be designed with a brass body, a replaceable brass cartridge chemical nickel plated, stainless steel springs and seals in EPDM. Each valve must also be designed for  $\pm 3^{\circ} F$  ( $\pm 2^{\circ} C$ ) temperature stability with a tamper proof control knob to lock the temperature at the set value. The valve shall be ASSE 1017 approved for point of distribution installation. Each valve shall be Caleffi model 521 of approved equal. (See product instructions for specific installation information.)

### **Dimensions**



Code	Α	В	С	D	Е	F
521400A	1/2"NPT	2 5/8"	5 1/4"	5 5/16"	3 3/8"	2 9/16"
521500A	3/4"NPT	2 5/8"	5 1/4"	5 5/16"	3 3/8"	2 9/16"
521600A	1"NPT	2 7/8"	5 7/8"	8 5/16"	3 11/16"	2 9/16"
521409A	1/2"SWT	2 1/4"	4 1/2"	5 5/8"	3 1/16"	2 9/16"
521509A	3/4"SWT	2 1/2"	5"	5 7/8"	3 1/4"	2 9/16"
521609A	1"SWT	3 1/16"	6 3/16"	6 7/16"	3 7/8"	2 9/16"

### **Technical Data**

Materials:

- Body: low-lead brass (<0.25 lead content)

- Shutter: PPO

- Springs: Stainless steel
- Seals: EPDM

- Seals: EPDM Setting range: 85-150°F (30-65°C)

Tolerance:  $\pm 3^{\circ} f (\pm 2^{\circ} C)$ 

Max working pressure (static): 200 psi (14 bar)
Max working pressure (dynamic): 70 psi (5 bar)

Max hot water inlet temperature: 200°F (93°C)

Maximum inlet pressure ratio (H/C or C/H):
Minimum temperature difference between

hot water inlet and mixed water outlet

Lead Plumbing Law Compliance:

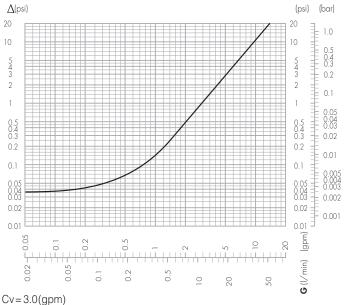
for optimum performance: 27°F (15°C) Certified to: ASSE 1017

Connections: 1/2"-1" NPT male with union 1/2"-1" sweat with union

0.25% Maximum

weighted average lead content

-Lead Plumbing Law Certified by IAPMO R&T



Cv = 3.0 (gpm) $Kv = 2.6 (m^3/h)$ 

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.

2:1

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