Scald Protection Three-Way Thermostatic Mixing Valve

5213 Series

Submittal Data 02916 NA - Issue Date 04/2010

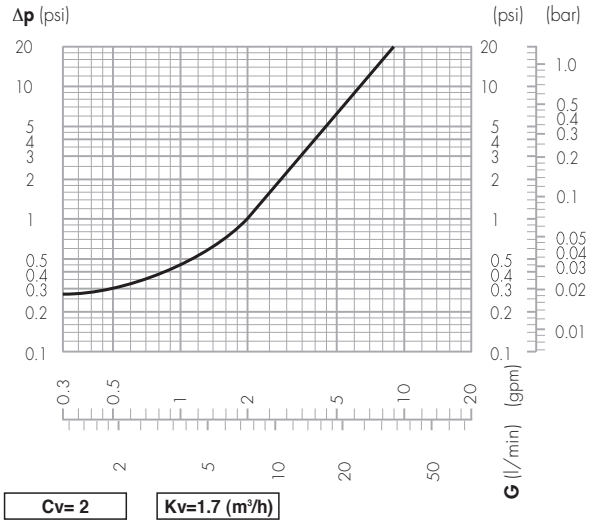
Application

Three-way thermostatic mixing valves are used in applications where the user must be protected from the danger of scalding caused by hot water. The Caleffi 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 fitting 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 Caleffi 5213 series is a high performance combination thermostatic and pressure balanced mixing valve and has been specifically ASSE 1070 listed (temperature can not exceed 120°F and check valves are recommended). The valve is complete with check valve at both hot and cold inlet

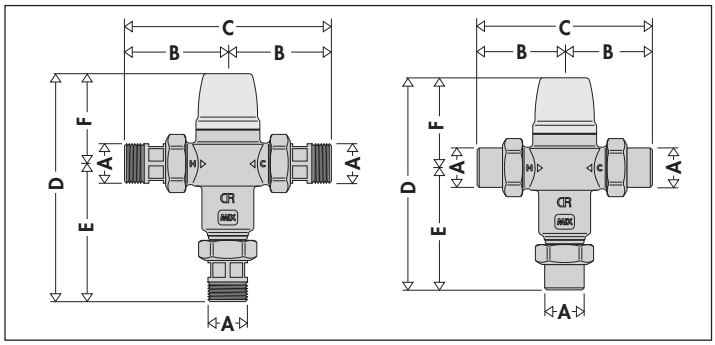
ASSE 1070

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 integrated inlet port check valves, stainless steel springs and seals in 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. Each valve shall be Caleffi model 5213 of approved equal. (See product instructions for specific installation information.)



Dimensions



Code	A	B	C	D	E	F	Weight (lb)	(kg)
521342A	1/2"NPT	2 13/16"	5 11/16"	4 15/16"	3"	1 15/16"	1.50	0.68
521352A	3/4"NPT	2 13/16"	5 11/16"	4 15/16"	3"	1 15/16"	1.65	0.75
521362A	1"NPT	2 15/16"	5 7/8"	5 3/16"	3 1/4"	1 15/16"	1.85	0.84
521349A	1/2"SWT	2 11/16"	5 7/16"	4 5/8"	2 11/16"	1 15/16"	1.40	0.63
521359A	3/4"SWT	2 7/8"	5 3/4"	4 13/16"	2 15/16"	1 15/16"	1.55	0.70
521369A	1"SWT	3 1/8"	5 5/16"	5 3/8"	3 1/4"	1 15/16"	1.74	0.79

Technical Data

Materials:

- Valve body and regulating spindle:	low-lead brass (<0.25 lead content)
- Internal shutter:	PPO
- Sealing elements:	EPDM
- Cover:	ABS
Temperature adjustment range:	85-120°F (29-49°C)
Temperature set:	must be commissioned on site to achieve desired temperature
Temperature control:	±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 working pressure (static):	140 psi (10 bar)
Maximum working pressure (dynamic):	70 psi (5 bar)
Minimum working pressure (dynamic):	1.5 psi (0.1 bar)
Maximum unbalanced dynamic supply (hot/cold or cold/hot):	6:1
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)
Minimum flow rate for stable operation:	1 gpm (4 l/min)
Certified to:	ASSE 1070 listed
Connections:	1/2" - 1" NPT male with union 1/2" - 1" sweat with union
Lead Plumbing Law Compliance:	0.25% Maximum weighted average lead content

-Lead Plumbing Law Certified by IAPMO R&T

Job name ..... Size .....

Job location ..... Quantity .....

Engineer ..... Approval .....

Mechanical contractor ..... Service .....

Contractor's P.O. No. ..... Tag No. .....

Representative ..... Notes .....

Caleffi North America, Inc. 3883 West Milwaukee Road / Milwaukee, WI 53208
Tel: 414.238.2360 / Fax: 414.238.2366 / www.caleffi.us