

valve
cimberio

ADJUSTABLE THERMOSTATIC BALANCING VALVE

cim 778



NO-LEAD

NSF/ANSI 61

cim 778

Adjustable Thermostatic Balancing Valve with Anti-Legionella Disinfection

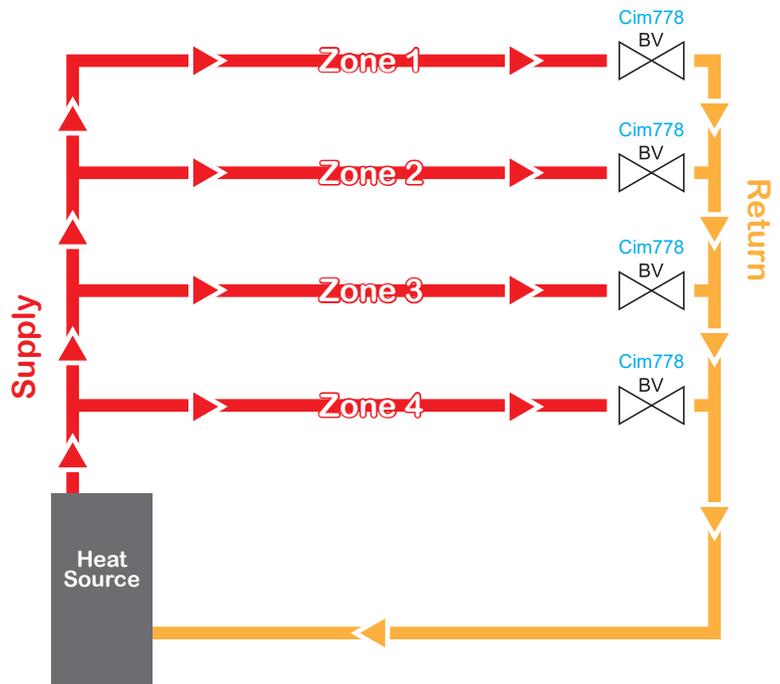
Cim 778 balancing valves allow temperature balancing in domestic hot water recirculation systems. Water temperatures can be easily adjusted by setting its integrated thermostat; no need to remove anything from the system. They guarantee desired temperatures at each point of the system and minimize heat loss. Cim 778 balancing valves feature a by-pass mechanism that intervenes in the case of thermal disinfection against Legionella, and are available with ball valves (2), an inline or swing check valve, and/or strainer.

How It Works

The Cim 778 thermostatic balancing valve opens and closes in response to the water's temperature. When the water's temperature is too low the Cim 778 opens to allow more water through. When the water's temperature reaches the valve's thermostat set-point the valve closes to allow less water through (the valve never fully closes to ensure water will always flow through the pump). To adjust the water's temperature use a slotted screwdriver to set the valve's thermostat.

Installation

Install the Cim 778 in the return line of each zone. When the supply water's temperature reaches the valve's thermostat set-point the valve closes and allows the water to remain in the supply, where it is utilized by the other zones. When the temperature of the supply is lower than the valve's thermostat set-point the valve opens and allows the water to return to the heat source where it is warmed and returned to the supply.



Advantages:

- Adjust Temperature without Removing Valve from the System
- Perform Legionella Disinfection without Removing Valve from the System
- No-Lead & NSF/ANSI 61 Certified
- Corrosion-Resistant Brass
- Options: Ball Valves (2), Inline or Swing Check Valve, and/or Strainer
- Optional Accessories: Temperature Gauge and/or Binder Points
- Replaceable Balancing Mechanism

Based on NSF/ANSI 61-2008 Annex G in compliance with Section 116875 of the California Health & Safety Code.

All Cimberio valves qualify for the American Recovery and Reinvestment Act and the Buy American Act.

Options:

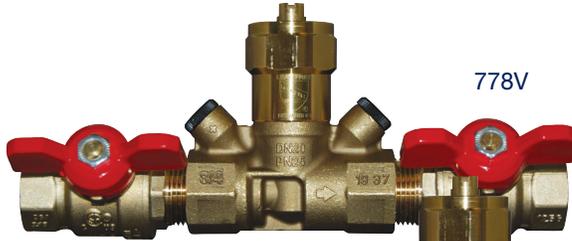
CimPRESS Connections

CimPRESS connections allow the valve to be installed faster saving labor costs.

778P



778V



778PV



Ball Valves (2):

Ball valves isolate the balancing valve allowing it to be maintained faster saving labor costs.

Inline or Swing Check Valve:

Check valves prevent the backflow of water that has dropped below the desired temperature set by the thermostat.

778VC



778PVC



778VW



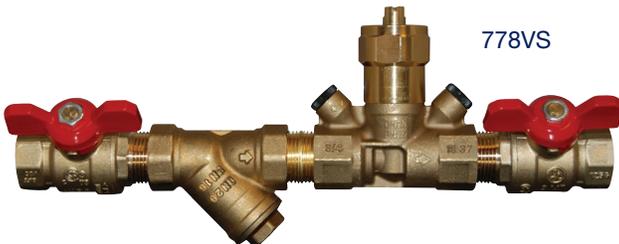
778PWW



Strainer:

A strainer helps remove imperfections in the water prior to it entering the balancing valve, extending the valve's longevity and ensuring the integrity of the system.

778VS



778PVS



Model Selection

The Cim 778 offers NPT or CimPRESS connections with or without ball valves (2), an inline or swing check valve, and/or a strainer. To order, simply provide a Cim No. by choosing the necessary items from the chart below. Accessories include optional temperature gauge and/or binder points.

Example: 778PVC-06 = 3/4" valve with CimPRESS connections, ball valves (2), and an inline check valve.

Connection		Ball Valve		Check Valve		Strainer		Size	
778	NPT	V	Ball Valves (2)	C	Inline Check	S	Strainer	04	1/2"
778P	PRESS			W	Swing Check			06	3/4"
								07	1"

Popular Models

NPT	Size	Cim No.	Description
	1/2"	778-04	Adjustable Thermostatic Balancing Valve
	3/4"	778-06	Adjustable Thermostatic Balancing Valve
	1"	778-07	Adjustable Thermostatic Balancing Valve

NPT	Size	Cim No.	Description
	1/2"	778V-04	with Ball Valves (2)
	3/4"	778V-06	with Ball Valves (2)
	1"	778V-07	with Ball Valves (2)

NPT	Size	Cim No.	Description
	1/2"	778VC-04	with Ball Valves (2) and Inline Check Valve
	3/4"	778VC-06	with Ball Valves (2) and Inline Check Valve
	1"	778VC-07	with Ball Valves (2) and Inline Check Valve

NPT	Size	Cim No.	Description
	1/2"	778VW-04	with Ball Valves (2) and Swing Check Valve
	3/4"	778VW-06	with Ball Valves (2) and Swing Check Valve
	1"	778VW-07	with Ball Valves (2) and Swing Check Valve

NPT	Size	Cim No.	Description
	1/2"	778VS-04	with Ball Valves (2) and Strainer
	3/4"	778VS-06	with Ball Valves (2) and Strainer
	1"	778VS-07	with Ball Valves (2) and Strainer

NPT	Size	Cim No.	Description
	1/2"	778VCS-04	with Ball Valves (2), Inline Check Valve, and Strainer
	3/4"	778VCS-06	with Ball Valves (2), Inline Check Valve, and Strainer
	1"	778VCS-07	with Ball Valves (2), Inline Check Valve, and Strainer

NPT	Size	Cim No.	Description
	1/2"	778VWS-04	with Ball Valves (2), Swing Check Valve, and Strainer
	3/4"	778VWS-06	with Ball Valves (2), Swing Check Valve, and Strainer
	1"	778VWS-07	with Ball Valves (2), Swing Check Valve, and Strainer

PRESS	Size	Cim No.	Description
	1/2"	778P-04	Adjustable Thermostatic Balancing Valve
	3/4"	778P-06	Adjustable Thermostatic Balancing Valve
	1"	778P-07	Adjustable Thermostatic Balancing Valve

PRESS	Size	Cim No.	Description
	1/2"	778PV-04	with Ball Valves (2)
	3/4"	778PV-06	with Ball Valves (2)
	1"	778PV-07	with Ball Valves (2)

PRESS	Size	Cim No.	Description
	1/2"	778PVC-04	with Ball Valves (2) and Inline Check Valve
	3/4"	778PVC-06	with Ball Valves (2) and Inline Check Valve
	1"	778PVC-07	with Ball Valves (2) and Inline Check Valve

PRESS	Size	Cim No.	Description
	1/2"	778PVW-04	with Ball Valves (2) and Swing Check Valve
	3/4"	778PVW-06	with Ball Valves (2) and Swing Check Valve
	1"	778PVW-07	with Ball Valves (2) and Swing Check Valve

PRESS	Size	Cim No.	Description
	1/2"	778PVS-04	with Ball Valves (2) and Strainer
	3/4"	778PVS-06	with Ball Valves (2) and Strainer
	1"	778PVS-07	with Ball Valves (2) and Strainer

PRESS	Size	Cim No.	Description
	1/2"	778PVCS-04	with Ball Valves (2), Inline Check Valve, and Strainer
	3/4"	778PVCS-06	with Ball Valves (2), Inline Check Valve, and Strainer
	1"	778PVCS-07	with Ball Valves (2), Inline Check Valve, and Strainer

PRESS	Size	Cim No.	Description
	1/2"	778PVWS-04	with Ball Valves (2), Swing Check Valve, and Strainer
	3/4"	778PVWS-06	with Ball Valves (2), Swing Check Valve, and Strainer
	1"	778PVWS-07	with Ball Valves (2), Swing Check Valve, and Strainer

Accessories:



Temperature Gauge

The water temperature gauge offers temperature verification at the valve for easier and more accurate balancing.

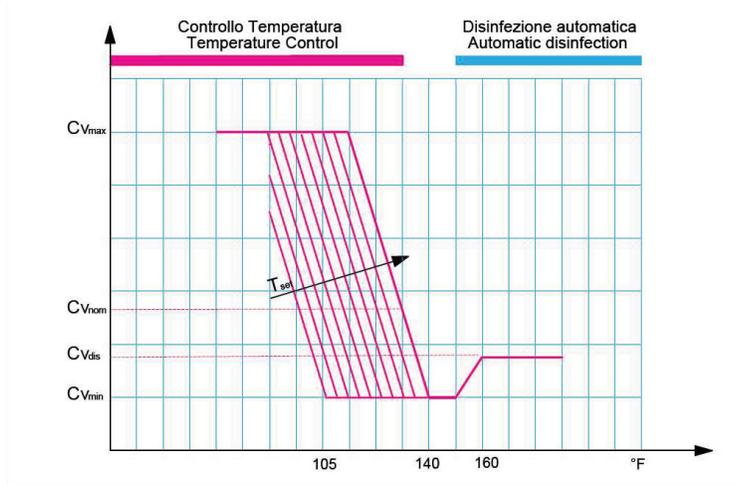


Binder Points

Binder Points allow for testing of the water's condition before and after the valve to ensure proper operation.

Technical Data

Technical data applies to Cim 778 thermostatic balancing valve *ONLY* (without any options).



Pressure Rating:

360 PSI

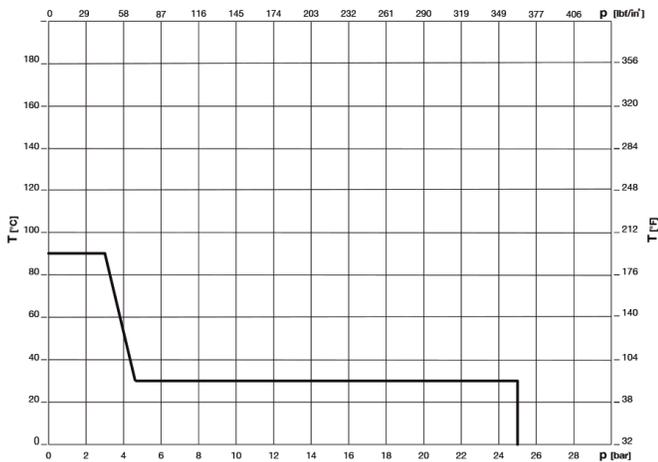
Working Temperature:

15° F – 200° F

Features:

- Adjustable Temperature Regulation
- F° or C° Temperature Settings
- Automatic Legionella Disinfection

Pressure temperature ratings



SIZE	1/2"	3/4"	1"
CV max	1.7	3.6	4.2
CV min	0.29	0.29	0.29
CV nom (dt=10°F)	0.7	0.8	0.9
CV dis	0.6	0.6	0.6

CV = Flow rate in GPM with a pressure drop of 1 PSI.

Technical Characteristics

Fluid: Water

Nominal Pressure: 360 PSI (PN 25)

Temperature: 15°F to 200°F

Temperature Setting Range: 105°F-140°F

Body Material: EN 12165-CW511L "NL" Brass

Threads: NPT - ANSI B1.20.1

CV CM CS MT

CV: Capacity in "U.S. gal/min" at pressure drop of "1 PSI"

CM: Working Torque in "lb x in"

CS: Starting Torque in "lb x in"

MT: Torque Breaking Point on the Sten in "lb x in"

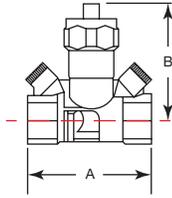
Element: Water – Temperature: 59.9° F

Working Pressure: 250 PSI

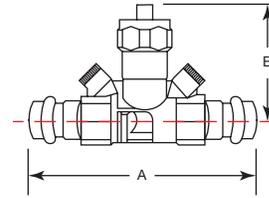
Max. Operating Temp: Working Limit for Fluids: -4° F – 248° F

Test Pressures: According to ISO 5208

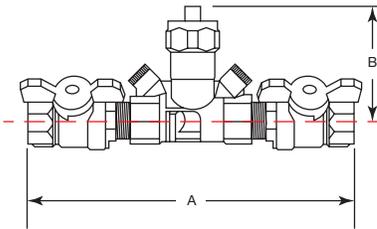
Dimensions



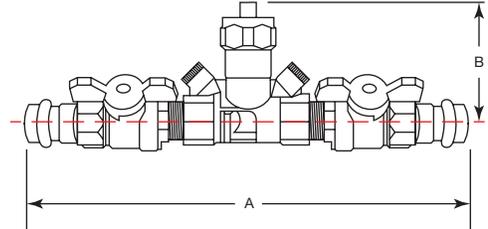
778			
SIZE	1/2"	3/4"	1"
A	3.062"	3.125"	3.438"
B	2.875"	2.9375"	3.0625"



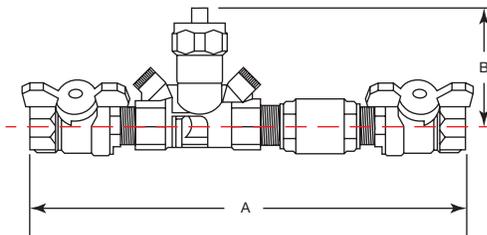
778P			
SIZE	1/2"	3/4"	1"
A	5.5"	5.875"	6.375"
B	2.875"	2.9375"	3.0625"



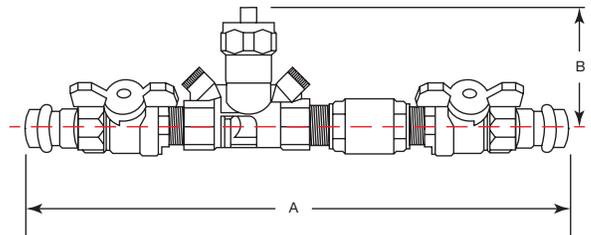
778V			
SIZE	1/2"	3/4"	1"
A	7.375"	8.375"	8.875"
B	2.875"	2.9375"	3.0625"



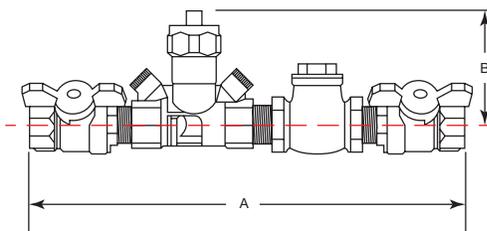
778PV			
SIZE	1/2"	3/4"	1"
A	9.75"	11"	11.75"
B	2.875"	2.9375"	3.0625"



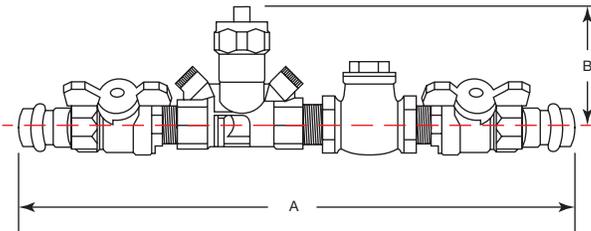
778VC			
SIZE	1/2"	3/4"	1"
A	9.875"	11.25"	11.875"
B	2.875"	2.9375"	3.0625"



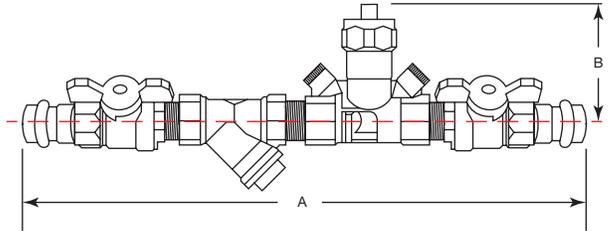
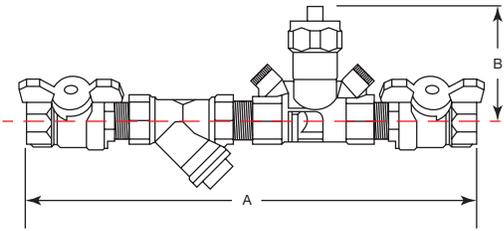
778PVC			
SIZE	1/2"	3/4"	1"
A	12.25"	13.875"	14.75"
B	2.875"	2.9375"	3.0625"



778VW			
SIZE	1/2"	3/4"	1"
A	9.75"	11"	12"
B	2.875"	2.9375"	3.0625"

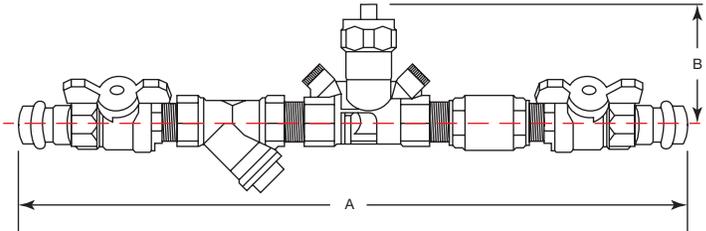
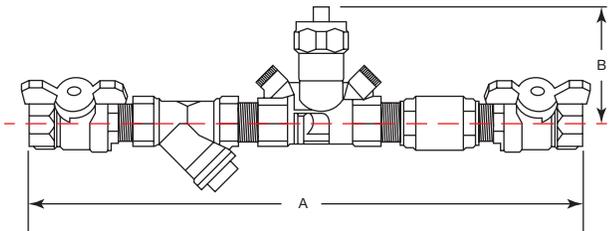


778PVW			
SIZE	1/2"	3/4"	1"
A	12"	13.75"	14.875"
B	2.875"	2.9375"	3.0625"



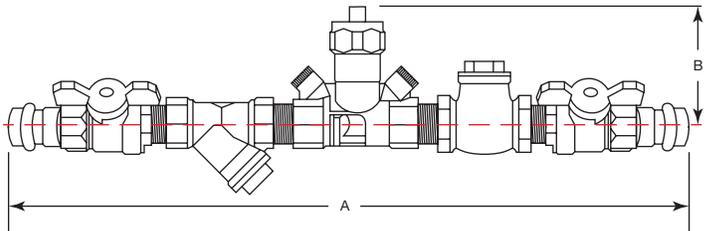
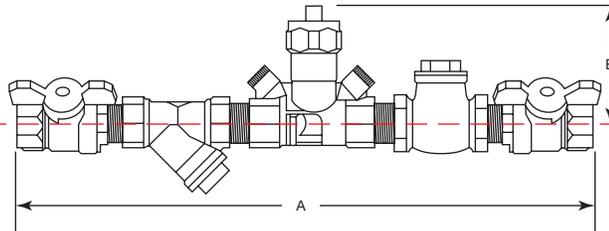
778VS			
SIZE	1/2"	3/4"	1"
A	10"	11.5"	12.25"
B	2.875"	2.9375"	3.0625"

778PVS			
SIZE	1/2"	3/4"	1"
A	12.375"	14.125"	15.125"
B	2.875"	2.9375"	3.0625"



778VCS			
SIZE	1/2"	3/4"	1"
A	12.625"	14.375"	15.25"
B	2.875"	2.9375"	3.0625"

778PVCS			
SIZE	1/2"	3/4"	1"
A	14.875"	17.125"	18"
B	2.875"	2.9375"	3.0625"



778VWS			
SIZE	1/2"	3/4"	1"
A	12.375"	14.125"	15.375"
B	2.875"	2.9375"	3.0625"

778PVWS			
SIZE	1/2"	3/4"	1"
A	14.75"	16.875"	18.25"
B	2.875"	2.9375"	3.0625"

Job: _____

Order #: _____

Engineer: _____

Submitted By: _____

Contractor: _____

Approved By: _____

Representative: _____

Date: _____

778 NPT							
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778 PRESS							
<input type="checkbox"/> 778P	<input type="checkbox"/> 778PV	<input type="checkbox"/> 778PVC	<input type="checkbox"/> 778PW	<input type="checkbox"/> 778PVS	<input type="checkbox"/> 778PVCS	<input type="checkbox"/> 778PWWS	



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