

## For Non-Health Hazard Applications

Job Name _____	Contractor _____
Job Location _____	Approval _____
Engineer _____	Contractor's P.O. No. _____
Approval _____	Representative _____

# HydroGuard® Series e420

## Under-the-Counter Thermostatic Tempering Valve

### Description

Hydroguard Series e420 Under-the-Counter thermostatic tempering valves are designed for all applications where the temperature of generated hot water must be controlled for safe, economic use. A powerful advanced thermal actuator quickly senses and compensates for temperature fluctuations induced by water temperature and pressure changes in the supply line.

Rugged construction features cast brass body and corrosion-resistant internal components for years of dependable, trouble-free service. Hex socket makes temperature adjustment quick and easy.

For restricted access control, the Series e420 valve can be housed in a stainless-steel or white baked enamel steel cabinet and can be packaged with solenoid valve(s), checkstops or other accessories common to Powers' cabinet supply offering.



Advanced Thermal Activation

### Specifications

Connections	1/2" (15mm) NPT Inlets and 1/2" (15mm) NPT Top Outlet
Capacity (without checkstops)	4.25 gpm (16.0 L/min)* (±0.25 gpm [0.95 L/min])
Maximum Hot Water Supply Temperature	190°F (88°C)
Minimum Hot Water Supply Temperature	10°F (6°C) above set point**
Maximum Operating Pressure	125 psi (862 kPa)
Temperature Ranges:	
Standard	65–115°F (18–46°C)
Low	40–90°F (4–32°C)
High	120–175°F (49–79°C)
Maximum Static Pressure	125 psi (862 kPa)
Minimum Flow	2.0 gpm (7.6 L/min)
Listing	ASSE 1070
Shipping Weight	5 lbs. (2.3 kg)

\* At 45 psi differential (310 kPa), with hot water supply between 140°–180°F (60–82°C) and 50/50 mix.  
 \*\* (not applicable to low temperature hot water valves)

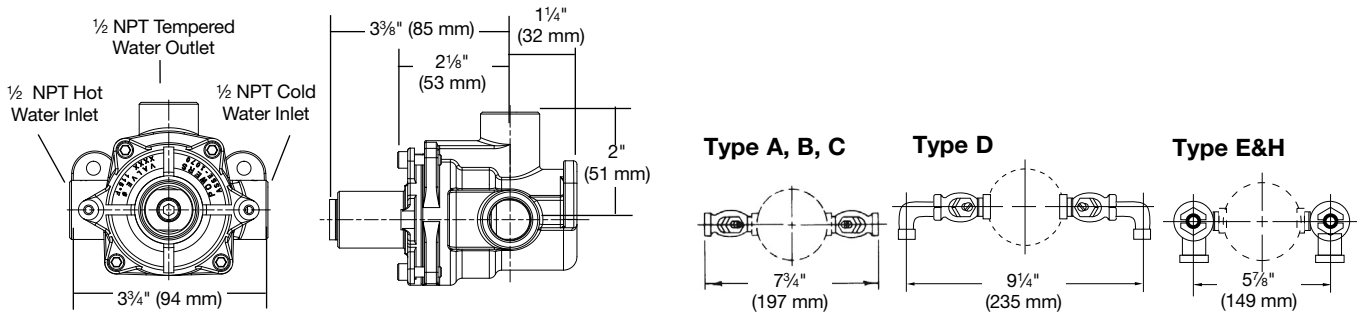
### Capacity — Table 1

Flow Capacity at 50-50 Mixed Ratio						
Pressure Drop Across Valve						
CV	5 psi	10 psi	20 psi	30 psi	45 psi	60 psi
	34 kPa	69 kPa	138 kPa	207 kPa	310 kPa	414 kPa
0.63	1.40 gpm	2.00 gpm	2.82 gpm	3.45 gpm	4.25 gpm	4.88 gpm
	5.3 lpm	7.6 lpm	10.7 lpm	13.1 lpm	16.1 lpm	18.5 lpm

**Warning: It is strongly recommended that checkstops be installed with this valve even when a downstream shutoff is used.**

Powers product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Powers Technical Service. Powers reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Powers products previously or subsequently sold.

# Dimensions



# Ordering Information

## Series e420 Under-the-Counter Valves

<b>e420</b> -		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Finish</b>	<b>Order Code</b>							
Rough Bronze .....	<b>RB</b>							
Chrome Plated .....	<b>CP</b>							
<b>Checkstops (Sold in Pairs)</b>								
None*	<b>O</b>							
Straight, 1/2" IPS, Rough Bronze .....	<b>A</b>							
Straight, 1/2" Sweat, Rough Bronze .....	<b>C</b>							
Angled, 1/2" Sweat, Rough Bronze .....	<b>D</b>							
Angled, 1/2" IPS w/ Strainer, Rough Bronze .....	<b>E</b>							
Straight, 1/2" IPS, Chrome Plated .....	<b>B</b>							
Angled, 1/2" IPS w/ Strainer, Chrome Plated .....	<b>H</b>							
<b>Capacity</b>								
Standard: 4.25 gpm (7.6 L/min.) .....	<b>S</b>							
<b>Temperature Range</b>								
Standard: 65° to 115°F (18° to 46°C) .....	<b>S</b>							
High: 120° to 175°F (49° to 79°C) .....	<b>V</b>							
Low: 40° to 90°F (4° to 32°C) .....	<b>W</b>							
<b>Cabinet</b>								
None .....	<b>0</b>							
Stainless Steel, Recessed .....	<b>1</b>							
Stainless Steel, Wall Mount .....	<b>2</b>							
Painted, Recessed .....	<b>3</b>							
Painted, Wall Mount .....	<b>4</b>							
<b>Piping</b>								
None .....	<b>O</b>							
Top/Top .....	<b>D</b>							
Bottom/Top .....	<b>E</b>							
Bottom/Bottom .....	<b>F</b>							
Bottom/Side .....	<b>G</b>							
<b>Options</b>								
Factory Installed Checks .....	<b>IN</b>							

\* It is strongly recommended that checkstops be installed with this valve when downstream shutoff is used.

# POWERS™

A WATTS Brand

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