

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

HydroGuard® Series e420

Thermostatic Mixing Valves e427 (Concealed)/ e428 (Exposed)

Description

The Series e427 and e428 HydroGuard® valves automatically mix hot and cold water to deliver blended water at any desired temperature within a specified range. The assembly contains an advanced thermal actuator which maintains the selected water temperature within rigid tolerances despite temperature and pressure fluctuations in the water supply.

Construction features include a built-in shutoff valve for delivery water, a poppet type mixing valve, a concealed adjustment for raising and lowering the temperature range, and corrosion resistant parts.

The Series e427/e428 HydroGuard® is simply constructed. All parts are accessible from the front, to facilitate cleaning and maintenance.

The Series e427/e428 HydroGuard® is preferred for a wide variety of applications because of its accuracy, reliability, and economy of water and energy. It is chiefly used in showers, baths, hospital hydrotherapy and residential areas, where precise, consistent water temperature is required.



Specifications

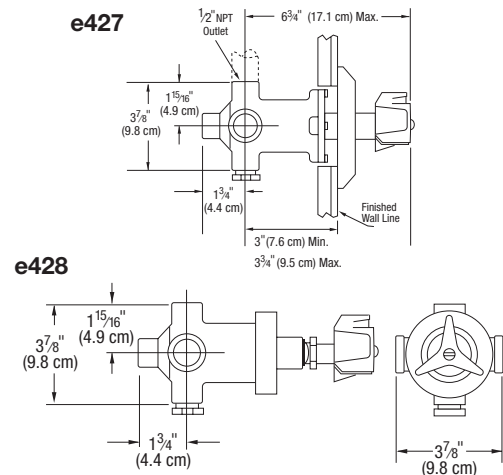
Maximum Hot Water Supply Temperature	190°F (88°C)
Minimum Hot Water Supply Temperature	10°F (6°C) Above Set Point
Maximum Operating Pressure	125 psi (861 kPa)
Temperature Range (standard)	90 – 110°F (32 – 43°C)
(low temperature)	60 – 100°F (16 – 38°C)
(high temperature)	100 – 160°F (38 – 71°C)
Connections	½" NPT
Capacity	14 gpm* (.90 l/s)
Minimum Flow	2.5 gpm
Maximum Static Pressure	125 psi (861 kPa)
Finish	Chrome Plated on e428, Rough Bronze on e427
Listing	ASSE 1016, IAPMO UPC
Approved Standard	ASSE 1016, CSA B125.1
Shopping Weight	6 lbs.

All HydroGuard® Series e420 thermostatic mixing valves meet above performance specifications based on typical operating conditions as stated in ASSE 1016 (45 psi pressure differential, hot water supply between 140°–180°F [60–82°C], cold water supply less than 70°F [21°C]).

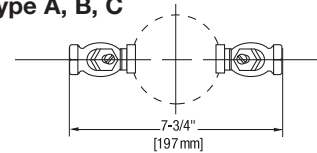
If your operating conditions vary from those stated in the standard, performance may vary as well. Consult your local sales representative or a Powers factory engineer to discuss your specific application.

* At 45psi differential [310 kPa], with hot water supply between 140°–180°F [60–82°C].

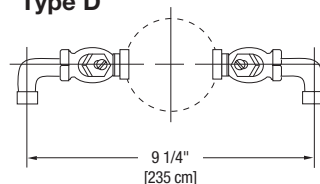
Dimensions



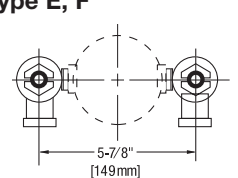
Type A, B, C



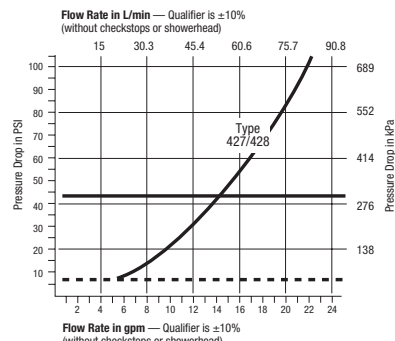
Type D



Type E, F



Flow Rate Curves & Checkstops



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.

How To Specify: Type e427 & e428 Valves for Shower or Tub Systems

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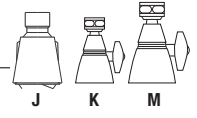
Valves
See front page for selection of valve order code

Checkstops (Sold in Pairs)

Concealed Straight, 1/2" IPS	A
Straight, 1/2" Sweat	C
Angled, 1/2" Sweat	D
Angled, with Strainer, 1/2" IPS	E
Exposed Straight, 1/2" IPS, Chrome-Plated	B
Angled, with Strainer, 1/2" IPS, Chrome-Plated	F
Factory installation of checkstops (Add suffix "X" to checkstop code) Min. order 10	X

Showerheads

Economizer, Chrome-Plated ABS, Adjustable	J
Standard, Chrome-Plated Brass	K
Deluxe, Chrome-Plated Brass	M
Low Flow (1.6 gpm), Chrome-Plated	G
Low Flow (1.5 gpm), Chrome-Plated	H




Arm and Flange Kits

Standard Arm and Flange	1
Deluxe Arm and Flange	2
Standard Arm/Flange & High Temp. Shutoff	4
Deluxe Arm/Flange & High Temp. Shutoff	5

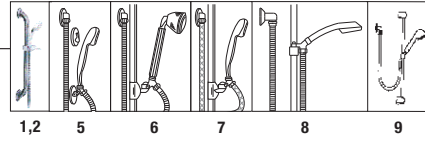
Tub Spouts

Diverter, Chrome-Plated Brass, 3/4" IPS	Q
Non-Diverter, Chrome-Plated, 1/2" IPS	R
Diverter, Chrome-Plated, 1/2" IPS	S
Diverter, Chrome-Plated Brass, 1/2" IPS	T
Diverter, Chrome-Plated, 1/2" Slip Fit	U



Hand Shower Systems

24" Chrome ADA Wall Grab Bar System	1
36" Chrome ADA Wall Grab Bar System	2
Deluxe, Metal Hose, 30" Slide Bar	3
Professional, Vinyl Hose, 30" Slide Bar	4
Standard, Metal Hose, Two Wall Hooks	5
Deluxe, Metal Hose, 24" Slide Bar	6
Professional, Vinyl Hose, 24" Slide Bar	7
Standard Plus, Metal Hose, 24" Slide Bar	8
European, Metal Hose, 23" Slide Bar	9
Low Flow (1.5 gpm), Metal Hose, 30" Glide Rail	L
Professional, Metal Hose, 30" Glide Rail	N



Diverter

Concealed Diverting Valve, Metal Handle, 1/2" Sweat	Y
Diverter, Concealed, Deluxe ABS Handle, 1/2" Sweat	A
Diverter, Concealed, Deluxe Metal Handle, 1/2" Sweat	B
Exposed Diverter, Shower Arm-Type, Chrome-Plated	Z

Vacuum Breakers

Vacuum Breaker, Elevated, Chrome-Plated	V
Vacuum Breaker, In-Line	W

Note:
For Shower OR Bath only application. Not suitable for Combination Bath & Shower application. If application requires tub spout and shower head/hand shower, choose an e420 or e700 series valve.



A WATTS Brand

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