

## HydroGuard® Series e420 - Thermostatic Mixing Valves e427 (Concealed)/e428 (Exposed)

### Product Specification

#### 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 .....	125psi (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 .....	1/2" NPT
Capacity .....	14 gpm* (.90 l/s)
Minimum Flow .....	2.5 gpm
Maximum Static Pressure .....	125psi (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.

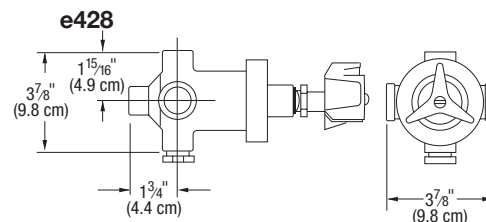
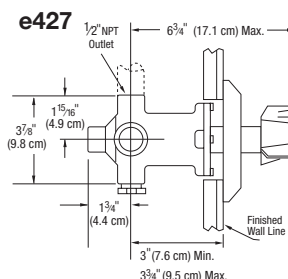
All HydroGuard® Series e420 thermostatic mixing valves meet above performance specifications based on typical operating conditions as stated in ASSE 1016 (45 psi pressure differential, hot water supply between 140°-180°F [60-82°C], cold water supply less than 70°F [21°C]).

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.

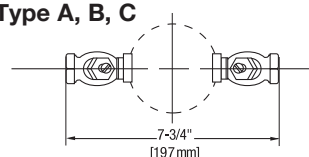
\* At 45psi differential [310 kPa], with hot water supply between 140°-180°F [60-82°C].



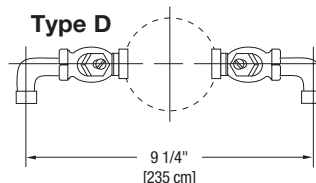
#### Dimensions ■



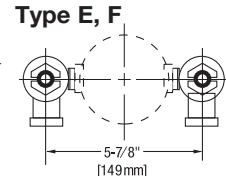
#### Type A, B, C



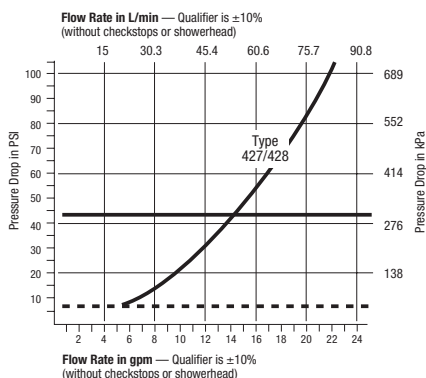
#### Type D



#### Type E, F



#### Flow Rate Curves & Checkstops ■



# How To Specify: Type e427 & e428 Valves for Shower and Tub/Shower Systems ■

## Valves

See front page for selection of valve order code

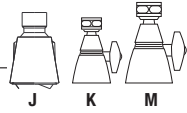
**Order Code**

## 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**

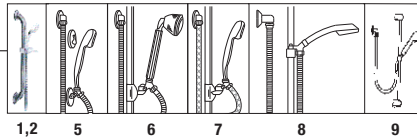
## Tub Spouts

- 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**



## Diverters

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

## Vacuum Breakers

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



### ENGINEERING APPROVAL

Project: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Architect/Engineer: \_\_\_\_\_

# POWERS™

A Watts Water Technologies Company



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