

HydroGuard<sup>®</sup> Series e420 - Thermostatic Mixing Valves e427 (Concealed)/e428 (Exposed)

# **Product Specification**

#### **Description**

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

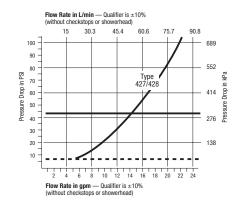
### Specifications

Maximum Hot Water Supply Temperature190°F (88°C)Minimum Hot Water Supply Temperature10°F (6°C) AboveMaximum Operating Pressure125psi (861 kPa)Temperature Range (standard)90 - 110°F (32 - 43)(low temperature)60-100°F (16 - 38°)(high temperature)100-160°F (38 - 7°)Connections1/2" NPTCapacity14 gpm* (.90 l/s)	3°C) °C)
Minimum Flow2.5 gpm	
Maximum Static Pressure 125psi (861 kPa)	
Finish Chrome Plated o	n e428,
Rough Bronze or	e427
Listing ASSE 1016, IAPN	10 UPC
Approved Standard ASSE 1016, CSA	
Shopping Weight	

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].

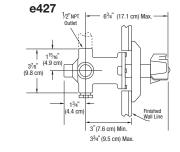
### Flow Rate Curves & Checkstops

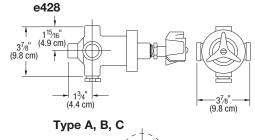


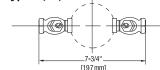


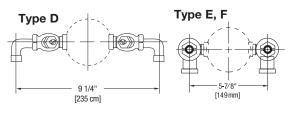
ES-P-e427

## Dimensions









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

Valves See front page for selection of valve order code	
Checkstops (Sold in Pairs)   Concealed Straight, 1/2" IPS   Aragled, 1/2" Sweat   C   Angled, 1/2" Sweat   D   Angled, with Strainer, 1/2" IPS   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	
Showerheads   Economizer, Chrome-Plated ABS, AdjustableJ   Standard, Chrome-Plated BrassK   Deluxe, Chrome-Plated BrassM   Low Flow (1.6 gpm), Chrome-PlatedG   Low Flow (1.5 gpm), Chrome-PlatedH	
Arm and Flange KitsStandard Arm and Flange.Deluxe Arm and Flange.2Standard Arm/Flange & High Temp. Shutoff.4Deluxe Arm/Flange & High Temp. Shutoff.5	
Tub Spouts   Diverter, Chrome-Plated Brass, 3/4" IPS	
Hand Shower Systems24" Chrome ADA Wall Grab Bar System.136" Chrome ADA Wall Grab Bar System.2Deluxe, Metal Hose, 30" Slide Bar.3Professional, Vinyl Hose, 30" Slide Bar.4Standard, Metal Hose, 7wo Wall Hooks.5Deluxe, Metal Hose, 24" Slide Bar.6Professional, Vinyl Hose, 24" Slide Bar.7Standard Plus, Metal Hose, 24" Slide Bar.7Standard Plus, Metal Hose, 24" Slide Bar.9Low Flow (1.5 gpm), Metal Hose, 30" Glide RailLProfessional, Metal Hose, 30" Glide RailN	
Diverters Concealed Diverting Valve, Metal Handle, 1/2" SweatY Diverter, Concealed, Deluxe ABS Handle, 1/2" SweatA Diverter, Concealed, Deluxe Metal Handle, 1/2" SweatB Exposed Diverter, Shower Arm-Type, Chrome-PlatedZ	
Vacuum Breakers Vacuum Breaker, Elevated, Chrome-PlatedV Vacuum Breaker, In-LineW	

#### **ENGINEERING APPROVAL**

Project:

Contractor: Architect/Engineer:





A Watts Water Technologies Company