For Non-Health Hazard Applications

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

Mechanical Metering Valve

Product Description

The Powers mechanical metering valve has a chrome plated brass push-button that is self-closing and tamper resistant. When activated, the valve opens to allow water flow for a preset time (up to 60 seconds), then automatically closes. The button can be pushed at any time to restart the timer. All operating and wearing parts (including valve seat) are contained in an easy to replace Celcon® cartridge. All exposed surfaces are easy to clean stainless steel or chrome plated. Tempered water should be supplied by an ASSE 1069 listed device such as Powers series LM495.

Operation

The metering valve consists of a cast bronze body around a timing cartridge. Inside the cartridge is a timing needle and sealed chamber of silicone fluid. Attached around the end of the cartridge is a plastic valve seat. By pressing the pushbutton, a bather forces open the valve seat to pass water to the showerhead.

The pushbutton action also forces the silicone inside the cartridge to flow across a piston check valve. As the silicone slowly meters back, the cartridge returns to its original state, and the valve seat stops the water flow. The distance between the valve seat and timing needle determines the metering cycle (shower run time). Turning the needle in or out adjusts the run-time from a few seconds up to one minute.

The entire timing mechanism remains separate from the water, which makes the valve reliable in any water condition. The button can be pushed at any time to restart the timer.

Specifications

Body	Cast bronze
Escutcheon	Stainless steel
Connections	1/2" NPT inlet/outlet
Stop Valves	Integral stop valve
Operation	Self closing, adjustable to 60 seconds
Max. Inlet Temperature	130°F (52°C)
Recommended Inlet Temperature	105°F (46°C)
Max. Operating Pressure	60 psig (414 kPa)
Capacity	5-7 gpm @ 35-40 psi differential (0.32
	0.44 l/s @ 241-276 kPa)

Order Code

Part #	Description
141-820	Metering Valve with Faceplate
141-839	Cartridge Assembly

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.



141-820



Typical Specification

Metering Valve shall be vandal-resistant with integral or separate checkstop. The timing mechanism shall be externally adjustable and shall be field adjustable for up to 60 seconds flow. All wearing parts should be contained in a replaceable Celcon[®] cartridge to provide resistance to scaling and liming. The timing mechanism shall be independent of the wearing parts and will have no water flowing through it. Valve body shall be cast bronze with stainless steel escutcheon, attached with stainless steel, vandal resistant screws. All other exposed parts must be chrome plated. Metering Shower Valve shall be Powers model 141 820.

Dimensions



