

## **G6021** Thermostatic Mixing Valve, 13 Gallon/49 Liter Capacity, Powder Coated Steel Surface Mounted Cabinet



Unit shown is G6021.1R1

**Application:** Thermostatic mixing valve to blend hot and cold water to deliver tepid water. Valve has flow capacity of 13 gallons (49 liters) per minute at 30 PSI (2.1 bar) pressure drop. Valve can be used to supply emergency eyewash, eye/face wash or drench hose unit. Depending on water supply size and pressure, valve can supply multiple units.

**Mounting:** Thermostatic mixing valve is mounted in powder coated steel surface mounted cabinet. Cabinet can be configured for right or left hinge with lock. Valve inlets can be configured on top or bottom of valve. Outlet can be configured on top or bottom. For configurations please see ordering info below.

**Temperature Control:** Valve has precision thermal actuator that senses incoming water temperature and automatically blends water to preset temperature. Valve is factory set to deliver 85°F (29°C) water. Temperature of tepid water can be adjusted as required and then locked. Furnished with dial temperature gauge as standard to monitor temperature of tepid water.

**Cold Water Bypass:** If the supply of hot water is restricted or interrupted, an internal bypass allows the valve to deliver cold water only. In bypass mode, the valve delivers 9 GPM (34 L/min) at 30 PSI (2.1 bar) pressure drop.

**Hot Water Shutoff:** Valve has internal PTFE valve seat. If the supply of cold water is interrupted, the valve will close completely and *not deliver any water at all*, eliminating any possibility of scalding.

**Flow Capacity:** Refer to table below for flow capacity of valve at specified pressure drops.

Checkstops/Filters: Each inlet has a lockable shutoff valve for maintenance, internal check valve to prevent backflow and stainless steel basket filter to remove debris from the water flow.

**Construction:** Valve meets the requirements of the U.S. Safe Drinking Water Act as lead-free.

Inlet/Outlet: 1/2" NPT female inlets and outlet as standard.

**Quality Assurance:** Valve is ASSE certified under ANSI 1071. Valve is fully assembled and factory tested prior to shipment.

#### **Water Pressure/Temperature Requirements**

**Supply Pressure:** Maximum incoming water pressure is 125 PSI (8.6 bar). Pressure of hot and cold water supplies can vary up to 25% and still deliver the flow and temperature required by ANSI/ASSE 1071.

**Hot Water Supply Temperature:** Incoming hot water temperature range is 120° - 180°F (49° - 82°C). Guardian recommends that the hot water temperature not exceed 140°F (60°C).

**Cold Water Supply Temperature:** Incoming cold water temperature range is 40° - 70°F (4° - 21°C). Cold water temperature must be at least 10°F (5.6°C) less than the temperature of the delivered tepid water.

**Tepid Water Temperature:** Temperature of tepid water is adjustable within a range of 65° - 95°F (18° - 35°C) and then locks in position. High temperature limit stop is set at 90°F (32°C) to prevent misadjustment.

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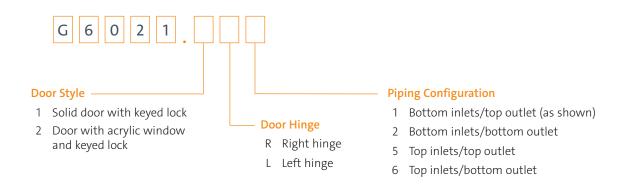
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| Pressure Drop (PSI)    | 1 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |
|------------------------|---|---|----|----|----|----|----|----|----|
| Flow Rate (GPM)        | 3 | 5 | 7  | 8  | 10 | 11 | 13 | 13 | 14 |
| Bypass Flow Rate (GPM) | 3 | 4 | 5  | 6  | 7  | 8  | 9  | 9  | 10 |

| Pressure Drop (Bar)      | 0.1 | 0.3 | 0.7 | 1.0 | 1.4 | 1.7 | 2.1 | 2.4 | 2.8 |
|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flow Rate (L/min)        | 11  | 19  | 26  | 30  | 38  | 42  | 49  | 49  | 53  |
| Bypass Flow Rate (L/min) | 11  | 15  | 19  | 23  | 26  | 30  | 34  | 34  | 38  |

#### **Ordering Information**

When ordering the G6021-XXX, the three digit code added to the model number specifies the following information. If no code is specified, the unit will be supplied with code 1R1 (solid door, right hinge and bottom inlets/top outlet).



| Avail | Available Options           |   |  |  |  |  |  |
|-------|-----------------------------|---|--|--|--|--|--|
|       | Finish                      | Chrome plated finish in place of raw brass (add suffix "CP)                     |  |  |  |  |  |
|       | Inlet/Outlet Threads        | G1/2 female thread on inlets and outlet (add suffix "G")                        |  |  |  |  |  |
|       | Temperature Gauges          | Temperature gauges on hot and cold water inlets (add suffix "IT")               |  |  |  |  |  |
|       | Pressure Gauges             | Pressure gauges on hot and cold water inlets (add suffix "IP)                   |  |  |  |  |  |
|       | Temperature/Pressure Gauges | Temperature and pressure gauges on hot and cold water inlets (add suffix "ITP") |  |  |  |  |  |

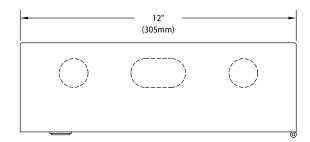
**Note:** Installation of temperature and/or pressure gauges will change rough-in dimensions of valve. Contact factory for catalog drawing.

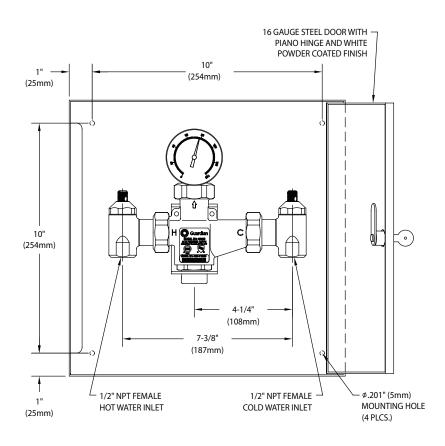
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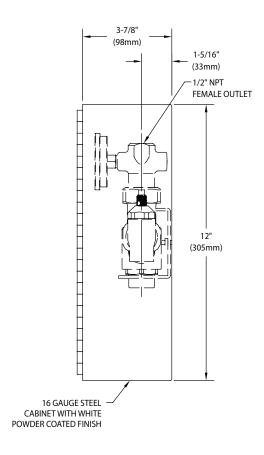
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THIS SPACE FOR ARCHITECT/ENGINEER APPROVAL

Due to continuing product improvement, the information contained in this document is subject to change without notice. All dimensions are  $\pm$  1/4" (6mm). Rev. 121724





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