

Water Temperature Control - Single Point of Use



Digital

Sense™ Model DMV23-Bath and Shower

Concealed digital mixing valve with surface mount control panel for combination bath and shower flow and +/-2°F (+/-1°C) temperature control. The Digital Mixing Valve (DMV) shall be of DZR brass/ stainless steel/polymer with chrome surface mount control panel. DMV shall have NPT inlets and outlet with integral inlet spring loaded check valves and strainers.



Operational Specifications

- Programmable timed flow
- No touch on/off flow control
- No touch temperature adjustment
- Programmable minimum/maximum temperature access limits
- Programmable service flush
- Programmable thermal disinfection mode
- Data logging capabilities

Technical Specifications

- Maintains mixed water temperatures +/-2°F at flow rates 1 - 7 gpm
- Delivers mixed water temperature within 2°F of either inlet supply temperature
- Instant automatic outlet shutdown upon either inlet supply failure
- Programmable temperature setpoint range 86°F - 117°F (min) and 91°F - 122°F (max)
- Programmable Thermal Disinfection option 140°F - 185°F for 0 - 50 minutes
- Operational water pressure of 10 - 145 psig

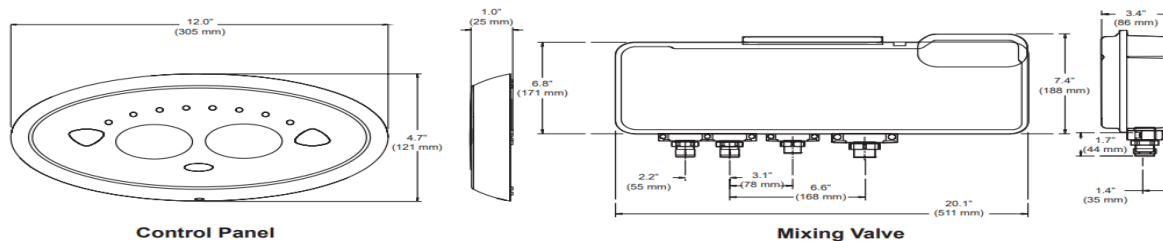


Connectivity

DMV shall be supplied with a power supply and wall mounted control panel. Control panel shall be programmable using Bluetooth connectivity for flow and temperature adjustment and shall be capable of programmable timed flow and temperature control. Programmable software and 120V 50-60Hz power supply. Infra-red no-touch surface mount control panel with 10ft cable. DMV shall have service flush with programmable thermal disinfection temperature range 140°F - 185°F for 0 - 50 minutes with data logging capabilities. DMV shall be compliant with ASSE Standard 1016, CSA B125, and UL and shall be so certified and identified.



For a submittal drawing, refer to D135731.



Sense™ Digital Mixing Valves												
Model	Pressure Drop (psi)										Min. Flow	C _v
	5	10	15	20	25	30	35	40	45	50		
DMV1	3	4	5	6	6	7	7	8	9	9	1	1.2
DMV2												
DMV23	6	8	10	11	12	14	15	16	17	18	1.6	2.5

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Digital

Sense™ Model DMV23-Individual Shower Technical Specifications

Connections

- Inlet and outlet connections: 1/2" NPT
- Outlet connection: Bath 3/4" NPT, Shower 1/2" NPT

Materials

- Control panel cover: Chrome ABS
- Mixing unit enclosure: PC/ABS
- Integral components: DZR brass stainless steel and engineering plastic

Temperatures

- Factory pre-set:
Shower Min 86°F (30°C), Max 106°F (41°C)
Default 100°F (38°C)
Bath: Min 86°F (30°C), Max 111°F (44°C),
Default 104°F (40°C)
- Programmable range:
Min 86°F - 117°F (30°C - 47°C),
Max 91°F - 122°F (33°C - 50°C),
Default 86°F - 122°F (30°C - 50°C)
Full cold can also be selected
- Minimum blend temperature differential from hot supply: 5°F (2°C)
- Optimum thermostatic control range:
86°F - 122°F (30°C - 50°C)
- Inlet Cold water range (recommended):
34°F - 68°F (1°C - 20°C)
- Inlet Hot water range (recommended):
122°F - 149°F (50°C - 65°C)
185°F (85°C) during disinfection

Performance

- Thermal shutdown upon inlet supply failure
- +/- 2°F (+/- 1°C) delivery temperature stability
- Minimum flow rate at recommended supply conditions:
1.6GPM (4 LPM) at <72 psi maintained pressure
2 GPM (6 LPM) at >72 psi maintained pressure.

Thermal Disinfection

- Factory Settings
Min. Temperature: 140°F (60°C)
Min. Time: 5 minutes
- Programmable Range
Min. Temperature: 140 - 185°F (60 - 85°C)
Min. Time: 0 - 50 minutes
Reduced water flow during disinfection can be selected.

Environment

- Ambient temperature: 34°F - 104°F (1°C - 40°C)
- Maximum relative humidity: 95% non-condensing Pressures
- Maximum static pressure: 145 psi (10 bar)
- Maximum inlet supply pressure differential: 3:1 (equal inlet pressures recommended)

Pressures

- Maximum static pressure: 145 psi (10 bar)
- Maximum inlet supply pressure differential: 3:1 (equal inlet pressures recommended)

IP Rating

- Control panel: IP45
- Overall valve enclosure: IP24
- Electronics compartment: IP45
- PSU: IP45

Electrical

- Supply Voltage: 120V 50-60Hz
- Maximum load: 20W at 12V DC
- Control panel cable length: 10 ft. (3m) supplied
- Maximum distance 20 ft. (6m)

Times - Factory settings

- Flow time shower: 30 seconds
- Flow time bath: 300 seconds
- Service flush cycle: 2 minutes
- Service flush waiting period: 12 hours

Programmable range

- Flow time shower : 5 seconds- 60 minutes
- Flow time bath : 5 seconds - 60 minutes
- Service flush cycle : 1 minute -59 minutes
- Service flush waiting period : 1 hour - 983 hours

Operation

- Temperature selector: Full no-touch temperature control
- Flow control: No-touch on/off - timed flow
- Independent bath and shower control

Approvals

- ASSE 1016, CSA, UL

Shipping Weight

- 14.5 lbs