

Water Temperature Control - Single Point of Use



Digital

Sense™ Model DMV1

Concealed digital mixing valve with surface mount control panel for lavatory flow and +/-2°F (+/-1°C) temperature control

Operational Specifications (DMV1)

- 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

*For metered lavatory applications Sense meets the requirement of ASME A112.18.1 of .25 gpm per operating cycle.

Technical Specifications (DMV1)

- 120V 50-60Hz power supply
- Maintains mixed water temperatures +/-2°F at flow rates 1 to 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

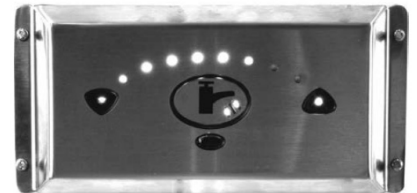
Connections

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.

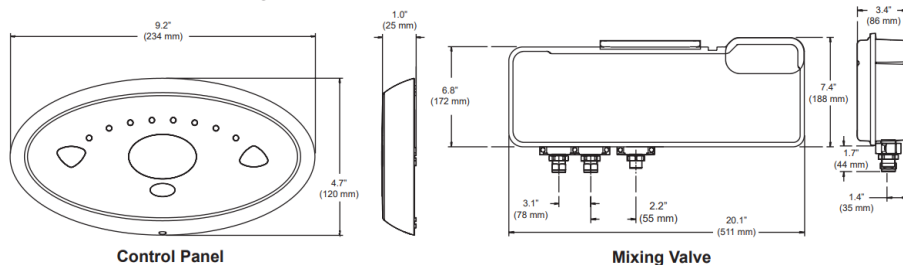
DMV shall be capable of delivering cold water directly from the cold water supply to the fixture in the event of a failure of the inlet hot supply. DMV shall have service flush with programmable thermal disinfection temperature range 140°F - 185°F for 0 - 50 minutes with data logging capabilities.

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 D135729.



Optional Stainless Steel Control Panel Cover



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 | 3 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 1 | 1.2 |
| 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 DMV1-Lavatory Technical Specifications

Connections

- Inlet and outlet connections: 1/2" NPT

Materials

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

Temperatures

- Factory pre-set:
Min 86°F (30°C), Max 106°F (41°C)
Default 100°F (38°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 GPM (4 LPM) at <72 psi maintained pressure
1.6 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

- Flowtime: 15 seconds
- Service flush cycle: 2 minutes
- Service flush waiting period: 12 hours

Programmable range

- Flowtime: 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

Approvals

- ASSE 1016, CSA, UL

Shipping Weight

- 14.5 lbs