

## Technical Data Sheet

# DigiTemp 2 Digital Water Mixing Valve

DigiTemp 2 is a next-generation digital mixing valve engineered for precise, reliable, and secure hot water temperature control in commercial and institutional facilities. Designed with advanced safety features, intuitive on device configuration, and broad integration capabilities, DigiTemp 2 ensures consistent performance while simplifying commissioning, monitoring, and long-term operation. Enhanced with Nexa connectivity, DigiTemp 2 empowers facility teams with remote insights, energy savings, and system-wide visibility across multiple buildings or campuses.



### Precision Temperature Control & Safety

DigiTemp 2 maintains mixed water temperature to within  $\pm 2^{\circ}\text{F}$  in accordance with ASSE 1017, ensuring safe, consistent delivery even in demanding applications. Its built in high-temperature sanitization mode helps address waterborne bacteria risks, and full-cold valve flow during power loss enhances fail-safe operation.

### Intuitive Digital Interface

A full color touchscreen display gives operators immediate access to configuration, passcode-protected settings, alerts, and a time-stamped error history, with no special tools or external software required.

### Integration-Ready for Modern Facilities

With native BACnet MSTP and Modbus support, DigiTemp 2 easily integrates into BAS environments. Its “Works with Nexa” capability adds next-level remote monitoring, alerting, data analytics, and temperature control.

### Works with Nexa – Smarter, Safer and More Connected

Nexa provides real-time visibility of valve assets across buildings, enabling proactive alerts, advanced charting, security controlled access levels, and energy-saving scheduling. Whether you manage one facility or an entire campus, a Nexa-enabled DigiTemp 2 keeps you informed and in control.



Valve Only



Control Only

# Features & Benefits

## Valve & Mechanical

- Cutting-edge valve design engineered for long-term reliability
- Lead Free\* construction compliant with lead-free installation requirements
- Integral check valves on hot and cold inlets prevent cross-flow
- Full-cold valve flow in case of power failure for added safety

## User Interface & Local Configuration

- Full-color touchscreen display
- On-site configurable without special tools or software
- Passcode-protected settings for secure adjustments
- Programmable alerts
- Time-stamped error message history

## Temperature Control & Safety

- Programmable set point range: 60°F to 180°F
- Temperature control accuracy:  $\pm 2^\circ\text{F}$  in accordance with ASSE 1017
- Single operating sensor for mixed outlet temperature reading
- High-temperature sanitization mode to address waterborne bacteria
- Programmable temperature setback schedule

## Connectivity & BAS Integration

- Mixed outlet temperature adjustable and monitored locally or remotely
- Remote access via BAS, Wi-Fi, or Ethernet connection to Nexa
- Native support for BACnet MSTP and Modbus protocols
- Wi-Fi security: WPA2-PSK, WPA2-PEAP-MSCHAPv2

## Expanded Functionality Through Nexa

- System visibility across multiple campuses/locations
- Remote temperature control for admin-level users
- System alerts via text and/or email
- Configurable alerts based on risk or safety level
- Two security levels for controlled access
- Data logging and auditing for compliance and performance tracking
- Advanced charting of all data points
- Insights into energy usage and load flow
- Energy savings via scheduled temperature setbacks
- 5-digit user access code for enhanced security



Notice: Nexa application is only available for use in Canada and the United States of America.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

## Specifications

|                                                                                                |                                                              |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Connection Type                                                                                | Sweat/Press (Street)                                         |
| Maximum Test Pressure                                                                          | 250 psi (1793 kPa)                                           |
| Maximum Operating Pressure                                                                     | 200 psi (1034 kPa)                                           |
| Maximum Operating Pressure Differential at Inlets                                              | 20% of Average Inlet Pressures with Maximum 20 psi (172 kPa) |
| Temperature Adjustment Range <sup>1</sup>                                                      | 60°F – 180°F (16°C – 82°C)                                   |
| Maximum Hot Water Supply Temperature                                                           | 200°F (93°C)                                                 |
| Minimum Hot Water Supply Temperature <sup>2</sup>                                              | 2°F (1°C) above set point                                    |
| Hot Water Inlet Temperature Range                                                              | 120°F – 180°F (49°C – 82°C)                                  |
| Cold Water Inlet Range                                                                         | 35°F – 80°F (2°C – 27°C)                                     |
| Maximum Cold Water Supply Temperature                                                          | 2°F (1°C) below set point                                    |
| Minimum Flow Demand                                                                            | 0 gpm (0.0 lpm)                                              |
| Minimum Total Valve Flow Required <sup>3</sup>                                                 | 3 gpm (11.36 lpm)                                            |
| Outlet Temperature Accuracy per ASSE 1017                                                      | ±2°F                                                         |
| <b>Outlet Temperature Accuracy at Recommended Minimum Flow Rates By Valve Size<sup>2</sup></b> |                                                              |
| DT2075VL @ 3 gpm                                                                               | ±2°F                                                         |
| DT2100VL @ 3 gpm                                                                               | ±2°F                                                         |
| DT2150VL @ 3 gpm                                                                               | ±2°F                                                         |
| DT2200VL @ 5 gpm                                                                               | ±2°F                                                         |
| Listing /Compliance                                                                            | ASSE 1017, cUPC, NSF 61 & 372                                |
| <b>Weight</b>                                                                                  |                                                              |
| DT2075VL                                                                                       | 19.0 lb (8.6 kg)                                             |
| DT2100VL                                                                                       | 19.1 lb (8.7 kg)                                             |
| DT2150VL                                                                                       | 24.06 lb (10.9 kg)                                           |
| DT2200VL                                                                                       | 34.19 lb (15.5 kg)                                           |
| Ambient Temperature                                                                            | 32°F – 122°F (0°C – 50°C)                                    |
| Ambient Humidity                                                                               | 0% – 90% RH noncondensing                                    |
| Environment                                                                                    | Suitable for Indoor Use Only                                 |

<sup>1</sup> Low Temperature Setpoint cannot be less than the cold water temperature. For best operation, hot water should be at least 2°F above desired set point.

<sup>2</sup> With equal pressure.

<sup>3</sup> Minimum flow (3 gpm) when DigiTemp 2 is installed at or near hot water source recirculating tempered water with a properly sized continuously operating recirculating pump.

## Control Electrical Specification

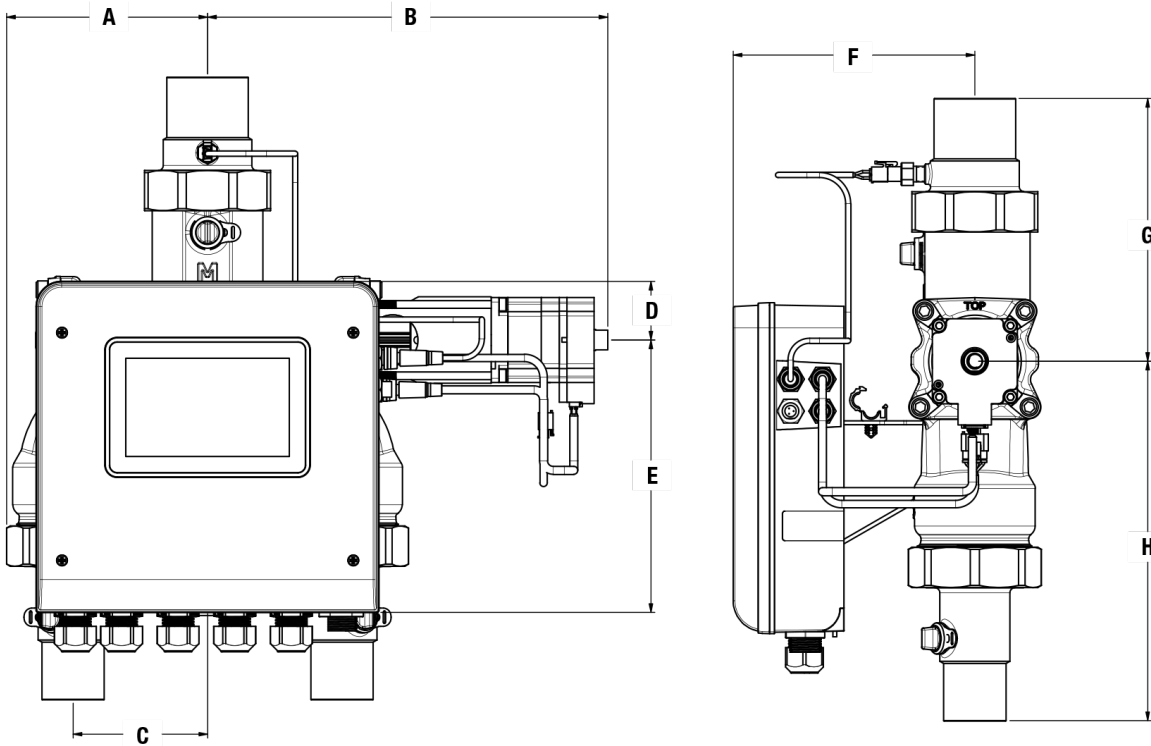
|                          |                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------|
| Input Power              | 120/240 V (ac) ±10%, 50/60 Hz, 17 W                                                                |
| Pump Relays (Motor Load) | 120/240 V (ac), 10/8 FLA, 50/48 LRA                                                                |
| Alert Relay              | 120/240 V (ac), 5 A, 1/6 hp                                                                        |
| Isolation Valve Relays   | 24 V (ac/dc), 5 A, Resistive                                                                       |
| +5V Capacity             | 25 mA maximum, Resistive, Class 2                                                                  |
| +20V Capacity            | 20 mA maximum, Resistive, Class 2                                                                  |
| Actuator Load            | 13 W                                                                                               |
| Pump Proof Demand        | 24 V (ac) or Short                                                                                 |
| Operating Temperature    | 32°F – 122°F (0°C – 50°C)                                                                          |
| Wi-Fi                    | 802.11 b/g/n, 2.4 GHz                                                                              |
| Listing /Compliance      | FCC/ISED, UL 60730-1, UL 60730-2-9, IEC 60730, <del>BACnet</del><br>Testing Laboratories (BTL), CE |

# Capacity

| Model                              | Inlet  | Outlet | Valve Size | Pressure Drop (PSI) |       |       |       |       |       |       | Cv   |
|------------------------------------|--------|--------|------------|---------------------|-------|-------|-------|-------|-------|-------|------|
|                                    |        |        |            | 5                   | 10    | 15    | 20    | 30    | 45    | 50    |      |
| DT2075VL                           | 3/4"   | 1"     | 3/4"       | 34.1                | 54.8  | 65.5  | 76.4  | 92.3  | 114.3 | 125.3 | 17.3 |
| DT2100VL                           | 1"     | 1 1/4" | 1"         | 50.5                | 73.4  | 91.6  | 103.8 | 131.1 | 159.8 | 170.6 | 23.2 |
| DT2150VL                           | 1 1/2" | 2"     | 1 1/2"     | 77.8                | 112.2 | 135.7 | 156.0 | 200.6 | 245.0 | 251.4 | 35.5 |
| DT2200VL                           | 2"     | 2 1/2" | 2"         | 100.4               | 149.4 | 184.0 | 216.2 | 256.5 | 317.0 | 332.3 | 47.3 |
| Flow at Pressures (GPM) WITH CHECK |        |        |            |                     |       |       |       |       |       |       |      |

# Dimensions

| Model    | Inlet  | Outlet | A      | B        | C      | D       | E       | F       | G        | H         |
|----------|--------|--------|--------|----------|--------|---------|---------|---------|----------|-----------|
| DT2075VL | 3/4"   | 1"     | 4 1/2" | 10 7/16" | 3"     | 1 1/2"  | 7 1/16" | 6 5/16" | 6 1/16"  | 8 1/2"    |
| DT2100VL | 1"     | 1 1/4" | 4 1/2" | 10 7/16" | 3"     | 1 1/2"  | 7 1/16" | 6 5/16" | 6 1/16"  | 8 15/16"  |
| DT2150VL | 1 1/2" | 2"     | 5 1/4" | 10 7/16" | 3 1/2" | 1 1/2"  | 7 1/16" | 6 5/16" | 6 13/16" | 9 3/8"    |
| DT2200VL | 2"     | 2 1/2" | 5 1/4" | 10 7/16" | 3 1/2" | 1 3/16" | 7 1/16" | 6 5/16" | 8 15/16" | 10 15/16" |



Heating and Hot Water Solutions

AERCO International, Inc. • 100 Oritani Drive • Blauvelt, NY 10913  
 USA: T: (845) 580-8000 • Toll Free: (800) 526-0288 • AERCO.com