

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 ¹	60°F – 180°F (16°C – 82°C)
Minimum Cold Water Supply Temperature	35°F (2°C)
Maximum Hot Water Supply Temperature	180°F (82°C)
Minimum Cold Water to Set Point Differential	2°F (1°C) below set point
Minimum Hot Water to Set Point Differential	2°F (1°C) above set point
Minimum Flow Demand	0 gpm (0.0 lpm)
Minimum Total Valve Flow Required ³	3 gpm (11.36 lpm)
Outlet Temperature Accuracy per ASSE 1017	±2°F
Outlet Temperature Accuracy at Recommended Minimum Flow Rates By Valve Size²	
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
Weight	
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

¹ 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.

² With equal pressure.

³ Minimum flow across the total valve is 3 gpm when installed at or near a hot water source and tempered water recirculation line with a properly sized, continuously operating recirculating pump.

Control Electrical Specification

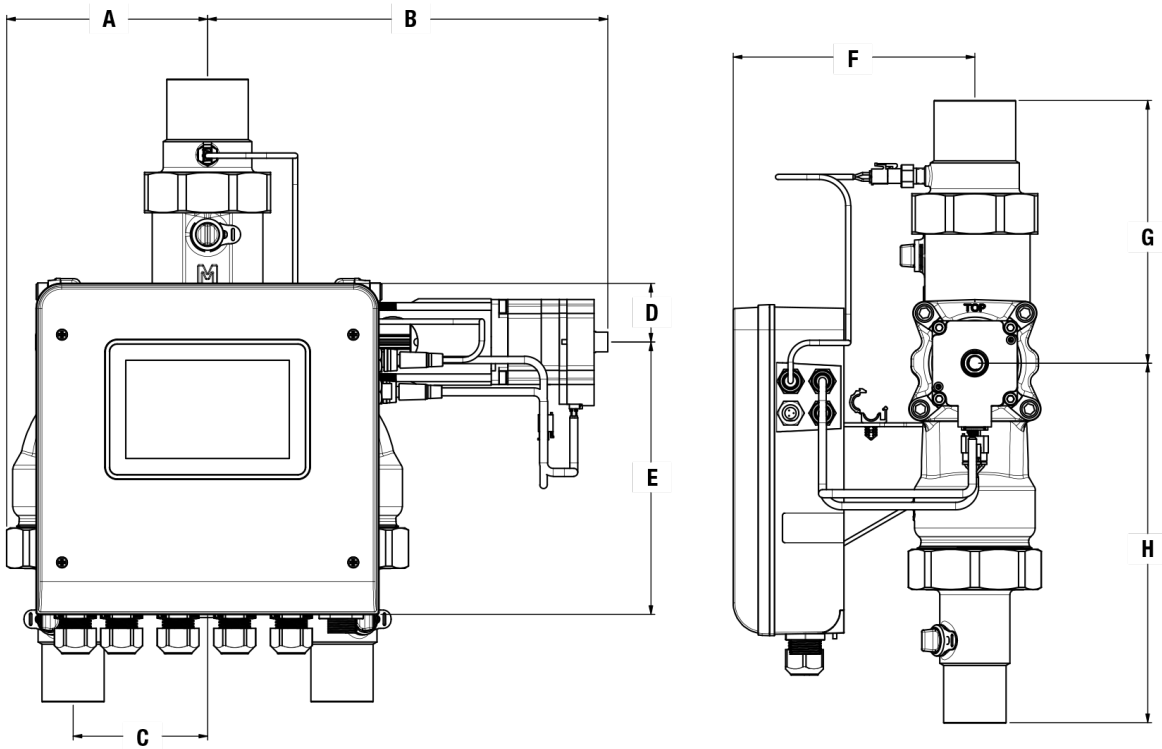
Input Power	120/240 V (ac) ±10%, 50/60 Hz, 17 W
Pump Relays (Motor Load)	120/240 V (ac), 10/8 FLA, 50/48 LRA
Alert Relay	120/240 V (ac), 5 A, 1/6 hp
Isolation Valve Relays	24 V (ac/dc), 5 A, Resistive
+5V Capacity	25 mA maximum, Resistive, Class 2
+20V Capacity	20 mA maximum, Resistive, Class 2
Actuator 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, CE

Capacity

				Pressure Drop (PSI)							Cv
Model	Inlet	Outlet	Valve Size	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"	11/2"	7 1/16"	6 5/16"	6 1/16"	8 1/2"
DT2100VL	1"	1 1/4"	4 1/2"	10 7/16"	3"	11/2"	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"	11/2"	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"	13/16 "	7 1/16"	6 5/16"	8 15/16"	10 15/16 "



Specification

Lead free digital water temperature control and monitoring system shall feature full-color touchscreen interface which is configurable on location and does not require factory pre-programming. System shall control water temperature to $\pm 2^{\circ}\text{F}$ in accordance with ASSE 1017 and resist “temperature creep” during periods of low/zero demand. The control shall be password protected and feature a user-adjustable outlet temperature range of 60°F to 180°F with high and low temperature alerts, and an approach temperature of 2°F .

System shall digitally control and monitor mixed outlet temperature. The control shall integrate with building automation systems (separate module not required) through BACnet and Modbus protocols and feature local and remote temperature alarms.

System shall provide monitoring and visibility of mixing valve assets across multiple locations/sublocations. System shall offer the ability to remote temperature control for admin levels.

System shall be capable of sending system alerts by text and/or email and prioritizing alerts based on levels of safety and potential liability. System offers two user levels for security. The control shall be equipped with secure Wi-Fi protocols WPA2-PSK and WPA2-PEAP-MSCHAPv2.

System shall feature a user-set, high-temperature sanitization mode for thermal disinfection of bacteria and a programmable temperature set back feature to improve energy efficiency. System shall also feature high speed actuator with override feature. In the event of a power failure, system shall open full cold supply. In case of a loss of cold water, the system shall close hot water supply.

System shall be listed/approved to ASSE 1017, cUPC, NSF, UL 60730-1, UL 60730-2-9, IEC 60730, and BTL (BACnet Testing Laboratories).

System shall be an AERCO DT2075VL, DT2100VL, DT2150VL, or DT2200VL.

NOTICE

A copy of the applicable limited warranty and disclaimers is available at aerco.com.

WARNING

Hot water poses a danger of burning or scalding above 110°F .

Setting the mixing valve to temperatures over 110°F without the protection of additional point of use mixing valves could result in scalding at point of use fixtures such as faucets, sinks, tubs, showers, etc.

The Sanitizing function produces high temperature at all point-of-use fixtures (faucets, sinks, tubs, showers, etc.) and extreme care must be taken to mitigate against the risk of personal injuries such as burning or scalding, or other property damage. The Sanitization function must only be used for the purposes of sanitizing the system, and never during normal operations or use.

Sanitation times and temperatures should be chosen based on your company's Sanitization Protocol requirements, your plumbing systems characteristics, and sanitation validation data.

Ensure proper time is allotted for proper cooldown of water system after sanitization in order for temperatures to return to normal. Not giving enough time for this cooldown period can also result in scalding at point of use devices.

WARNING

DigiTemp 2 system provides user-directed control and monitoring of water distribution systems. The Sanitization mode is intended for use as part of a user-directed, controlled, and supervised protocol that has been safely and properly designed.

It is recommended to install the DigiTemp 2 system as part of a ASSE compliant water distribution system, including point-of-use mixing valves.

Installation and adjustment of the DigiTemp 2 system are the responsibility of the owner and installer and must be done by qualified personnel in accordance with the manufacturer's instructions, and complying with all governmental requirements, building and construction codes and standards. The owner and user of the DigiTemp 2 system are responsible for selecting and installing the product in an appropriate water distribution system, proper sizing, maintaining proper water quality/condition, and deciding what temperature is safe and appropriate for the water distribution users and facility.

Always read and follow Installation, Operation, and Maintenance Manual and all product warnings and labels, and comply with all governmental and safety requirements.



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