



Water Temperature Control - Recirculation Systems

Digital

The Brain® Model DMC25BS Flex

DMC25BS Flex is a fully Digital Mixing Center (DMC), with SAGE - hot water system monitoring and reporting tool, designed specifically to be the primary water temperature controller in a continuously pumped circulating hot water system.

Digital technology provides enhanced water temperature control accuracy which resists zero system demand "Temperature Creep" without the use of a manual throttling valve or a temperature activated pump shut-off device (aquastat).

Completely integral digital valve with no need for external or ancillary components such as actuators, sensors or controllers.

Operational Specifications

- Ready to go out of the box or field adjustable via Bluetooth connectivity with the SAGE mobile app
- +/-2°F DRV water temperature control at peak, moderate or zero fixture demand on hot water system designed for continuous recirculation
- 2°F minimum recirculating water temperature differential
- Programmable set point range of 81-158°F (27-70°C) capable of BAS or SAGE® mobile app for monitoring and adjustment
- Programmable thermal disinfection range of 158-185°F (70-85°C)
- Automatic safe closure of hot water inlet in response to: inlet supply failure, 110V power failure, or programmable high temperature error
- Automatic safe closure of hot water inlet powered by a replaceable lithium battery monitored for low-level alerting

Technical Specifications

- 100-240V AC
- Polymer Electronics Enclosure
- Stainless Steel Valve Construction
- Lead Free compliant
- Maximum inlet HW supply temperature 185°F (85°C)
- Minimum Continuous Recirculation - 2 GPM (7.6 LPM)
- Minimum System Draw Off - 0 GPM
- Conforms to ASSE 1017, CSA B125.3-11, UL E357437, and CE
- Operational water pressure of 10-150 psig (.7-10.3 barg)
- Bluetooth (BLE) enabled for direct communication with the DRV25 via the SAGE mobile app status dashboard and programming.
- Shipping weight 47 lbs (21.4 kg)

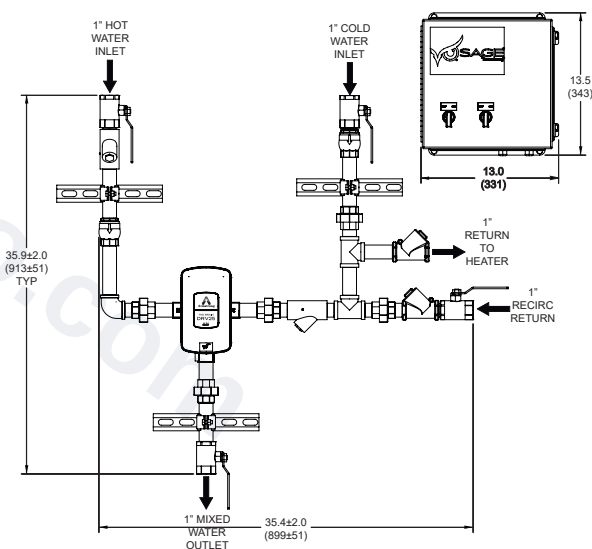
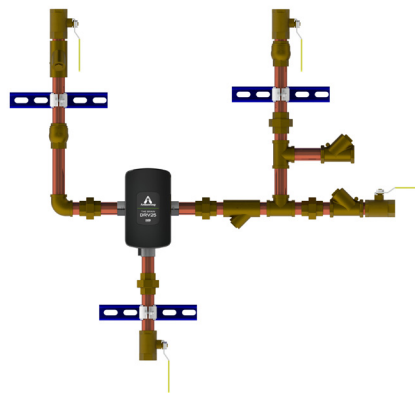
Connectivity

SAGE® – Hot water system monitoring and reporting tool.

For Building Automation Systems – Interface module available with Building Automation System (BAS) specific ProtoCessor cards for system which operate on the Modbus, BACnet™, or Lonworks™ protocols.

For the Web – Dashboard operable smart, hot water system monitoring and reporting software that works seamlessly as it analyzes data to track behavior and performance ensuring full compliance with ASHRAE, VA and World Health Organization hot water system safety guidelines.

'BS' Model Nomenclature refers to - Building System hardware used with SAGE®



For a submittal drawing, refer to D113242.

Recirculation Systems - Digital (GPM and PSIG)

Model	Pressure Drop (PSIG)				Minimum System Draw-Off	C _v
	5	10	15	20		
DMC25BS Flex						
GPM	22	31	39	45	0	9.8

Recirculation Systems - Digital (LPM and BARG)

Model	Pressure Drop (BARG)				Minimum System Draw-Off	K _v
	0.3	0.7	1.0	1.4		
DMC25BS Flex						
LPM	81	118	145	171	0	8.5