Water Temperature Control - Recirculation Systems



Digital

The Brain® Model DMC25 Flex

DMC25 Flex is a fully Digital Mixing Center (DMC) 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
- 1°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 with no recirculation 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 27 lbs (12.3 kg)

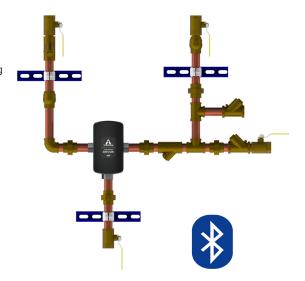
Connectivity

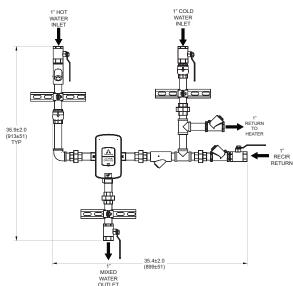
RS485 Serial Port – Integral MODBUS RTU for direct connectivity to BAS. Seamless integration with SAGE® (BS) connectivity options.

SAGE® mobile app allows for Bluetooth (BLE) communications with the DRV25 and SAGE® to Cloud communications if optional mobile connectivity subscription is activated

See DMC25BS Flex for SAGE® (BS) module available with specific ProtoCessor cards for BAS Connectivity to systems which operate on Modbus TCP, BACnet™, or LonWorks™ protocols. Mobile Connectivity may be enabled by a customer activated no-term subscription.

Mobile Connectivity features smart hot water system dashboard monitoring, secure remote programming, multi-location view, temperature and system diagnostic alerts, with unlimited digital documentation and automated report generation.





For a submittal drawing, refer to D113241.

Recirculation Systems - Digital (GPM and PSIG)										
Model		Pressure D	rop (PSIG)		Minimum System Draw-Off	C _v				
DMC25 Flex	5	10	15	20						
GPM	22	31	39	45	0	9.8				

Recirculation Systems - Digital (LPM and BARG)										
Model		Pressure D	rop (BARG)		Minimum System Draw-Off	V				
DMC25 Flex	0.3	0.7	1.0	1.4	Millilliani System Diaw-On	N _V				
LPM	81	118	145	171	0	8.5				

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