



Digital



Digital Intelligence

- Thinks for itself and talks to the building
- PDA programmable
- Engineered exclusively for Recirculating Hot Water Systems

Digital Safety & Hygiene

- Programmable system safety alerts
- Shuts off upon inlet supply failure
- Shuts off Hot Water upon power failure & “out of temperature range” mode.
- Promotes compliance with OSHA & CDC Legionella Guidelines.

Digital Stability and Control

- Typical System Temperature Control +/-2F
- Controls system “temperature creep”
- 0-150 GPM “Out of the Box” Solution

Digital Connectivity

- BAS & LAN interface capability
- Integral Serial Data Ports
- BacNet, Lonworks compatible (BrainScan™)
- Web-Enabled (BrainScan™)

Digital

DRV80R

DRV 80R is a fully digital recirculation valve (DRV) for "point of source" or mechanical room based installation. DRV 80 is designed specifically to be the primary water temperature controller in a continuously pumped recirculating hot water system.

Model DRV 80R is a single installer/operator programmable "Plug and Play" solution for systems which experience diverse user draw-off between 0 to 150 GPM and includes a recirculation system return manifold assembly.

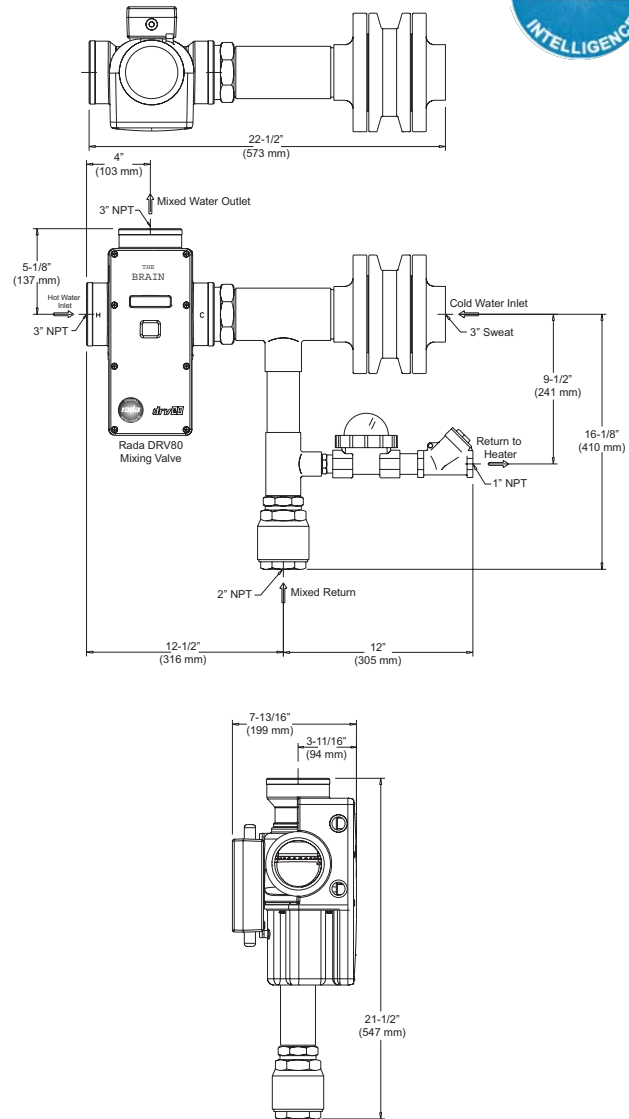
Operational Specifications

The enhanced accuracy possible with DRV80 digital technology, combined with its data input/output communication capability equals:

- Accurate control of blended water drawn from the system at a point of use typically within $\pm 2^{\circ}\text{F}$ at draw off points a minimum of 5m downstream of mixing valve during consistent system demand periods
- Operational water pressure of 10 -150 psig
- Minimum valve inlet to outlet temperature requirement (system recirculation temperature loss) of 2°F
- Automatic shutoff of hot water flow upon cold water inlet supply failure
- Automatic shutoff of hot water flow in the event of a power failure
- Maintain a consistent system "idling" temperature and control "temperature creep" without the use of a manual throttling device or balance valve.
- System shall not require a temperature activated pump shut-off device (aquastat).
- Programmable set point range of 100-160°F (37-71°C) plus full hot/full cold
- Ability to thermally disinfect at recommended temperatures
- Programmable 1st level hi/lo temp alarm display
- Programmable temperature error level for safety shutdown

Technical Specifications

- 100-240 V Power supply (12 V AC output)
- 2 x 4-20 mA current loop interfaces:
Input: Setpoint Selection
Output: Measured Blend Temperature
- Relay output: 24V DC/240 V AC SPCO
Error Relay: Activated in error mode
- Serial Connection Data Port*
- Optional External Network Adapter*
- Stainless Steel Construction
- 3" NPT Connections (optional 2" adapter)
- Recirculation system return manifold assembly.
2" System Return Check Valve
1" Return to Heater Line Check
2" Return to Heater Line Ball Flow Indicator
3" CW inlet Check Valve
- ASSE 1017 and CSA B125 Certified



For a fully detailed certified drawing, refer to CD# D6775.

Recirculation Systems - Digital

Model	Pressure Drop (psi)				Minimum System Draw-Off	Maximum Flow @9'/sec.	C _v
	5	10	15	20			
DRV80/R	78	111	136	157	0	193	35
DMC1	78	111	136	157	0	193	35
DMC2	156	222	272	314	0	386	70

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.