FUNCTIONS AND FEATURES

- The 116 series is designed for domestic hot water recirculation systems, to speed hot water delivery, reduce water waste and save energy. Matches perfectly with variable speed recirculation pumps for efficient energy usage.

- Installed on each return branch of the recirculation circuit, the self modulating valves balance the recirculation circuits to prevent uneven temperature distribution.

- Field adjustable from 95°F through 140°F for precise temperature control with locking knob to prevent tampering.

- For systems using thermal disinfection as Legionella growth protection, a model with second thermostatic by-pass cartridge opens at 160°F to allow system flushing during thermal disinfection cycle.

- Alternately, thermal disinfection can be achieved by a model with a second by-pass valve activated with an electric actuator mounted and controlled by the thermal disinfection system.

- Valve is complete with dry well for temperature gauge or temperature probe for remote measurement and control of disinfection cycle.
PRODUCT RANGE

CODE | CONNECTIONS
---|---
116140A | ½” NPT female without gauge
116150A | ¾” NPT female without gauge
116141A | ½” NPT female with gauge
116151A | ¾” NPT female with gauge

CODE | CONNECTIONS
---|---
116240A | ½” NPT female with gauge
116250A | ¾” NPT female with gauge

With second thermostatic by-pass cartridge for thermal disinfection function

OPERATING PRINCIPLE

The balancing cartridge modulates the valve opening in response to changing water temperature, and when near the desired temperature setting, closes the valve to minimum position. This allows hot water supplied by the circulator to be distributed to the other branches resulting in effective automatic thermal balancing. The automatic response allows each hot water branch to quickly deliver hot water to each fixture.

The balancing thermostat

When thermal disinfection is used for legionella growth protection, the function is activated by a second thermostatic by-pass cartridge that opens at 160°F, opening to allow flow for the disinfection process independent of the almost-closed balancing thermostatic cartridge.

Thermal disinfection by-pass cartridge

Alternately, thermal disinfection can be achieved by a model with a by-pass valve controlled with an optional electric actuator, code 656 series.

Thermal disinfection by-pass valve

REFERENCE DOCUMENTS:

116 series - Technical brochure 01325

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