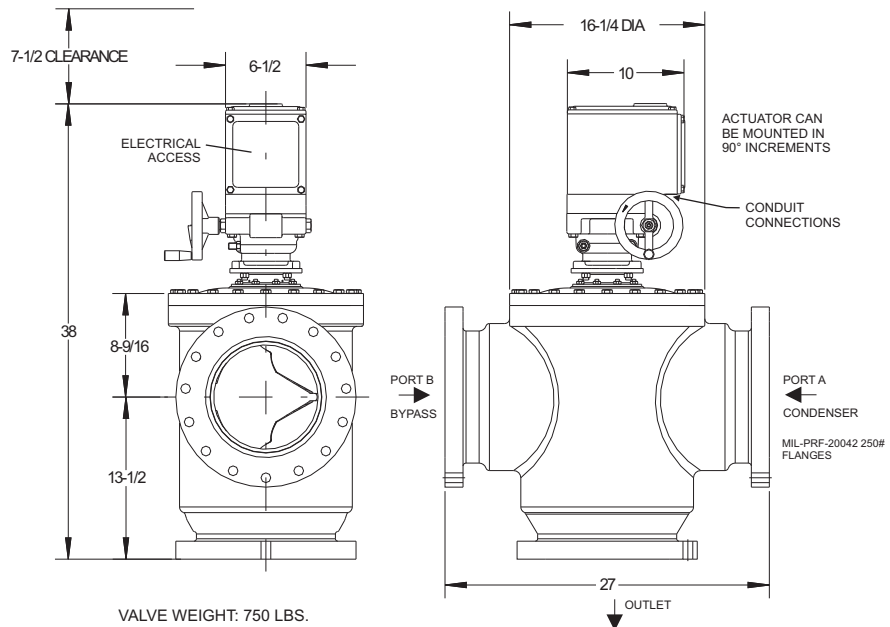


SELECTION CRITERIA

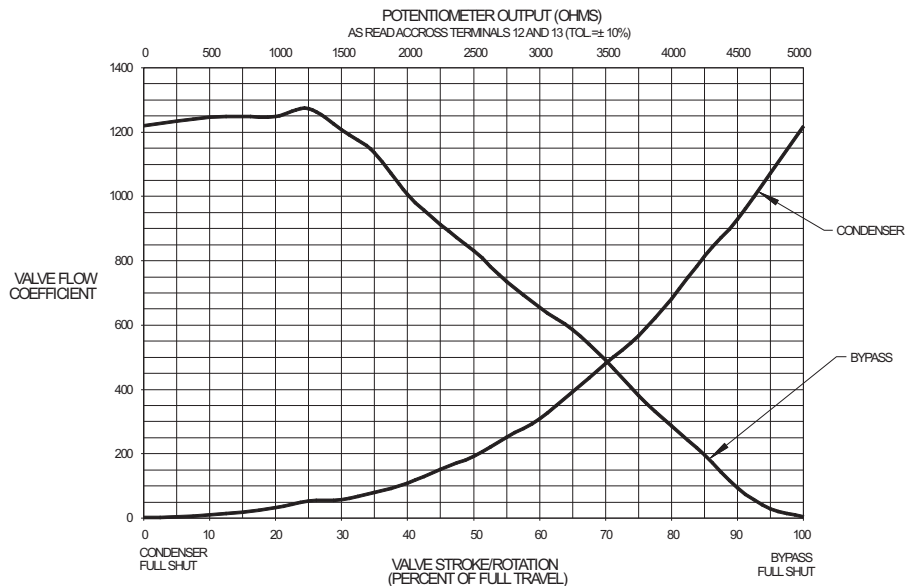
- Seawater service
- 115 VAC, 60Hz, 1 PH, 2.5A
- Shock Qualified (MIL-S-901D)
- Vibration Qualified (MIL-STD-167)
- Cv = 1044 Min.
- MIL-PRF-20042, 250 Pound Flanges
- 3-Way mixing configuration
- 10" NPS
- 220 PSI water pressure rating
- 330 PSI proof pressure

CONSTRUCTION DETAILS

- Copper nickel internals
- Buna-N seals
- Delrin® seat seals
- Body material: Copper nickel
- Custom Materials Available

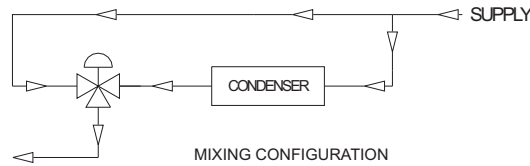


FLOW DATA



HEAD PRESSURE REGULATOR TYPICAL APPLICATION

- Typically used to modulate the cooling water through a condenser in response to a control signal from the condenser. Refrigerant head pressure is maintained over a wide range of operating conditions for maximum system operating efficiency.



INSTALLATION & OPERATION

Valves can be mounted in any position without affecting performance. However, consider the accessibility of the electrical connections and the manual override handwheel. Connect wiring per Wiring Diagram. Actuator provides NPT conduit entry points.

An orifice cylinder rotates in response to 115 VAC pulses to the actuator. An opening in the orifice cylinder allows one port to open as it covers the other. Adjustable limit switches in the actuator determine the two extreme positions of the orifice cylinder.

For head pressures above the set point, the "OPEN" terminals #1 and #3 of the actuator are energized to change the flow rate as required to bring the pressures within the desired range. The duration and timing of the 115 VAC power determines the position of the orifice cylinder. Head pressure below the set point results in a signal to the actuator energizing the "CLOSE" terminals (#1 and #2) reversing the rotation of the cylinder, reducing the opening of the condenser port while increasing the opening of the bypass port.

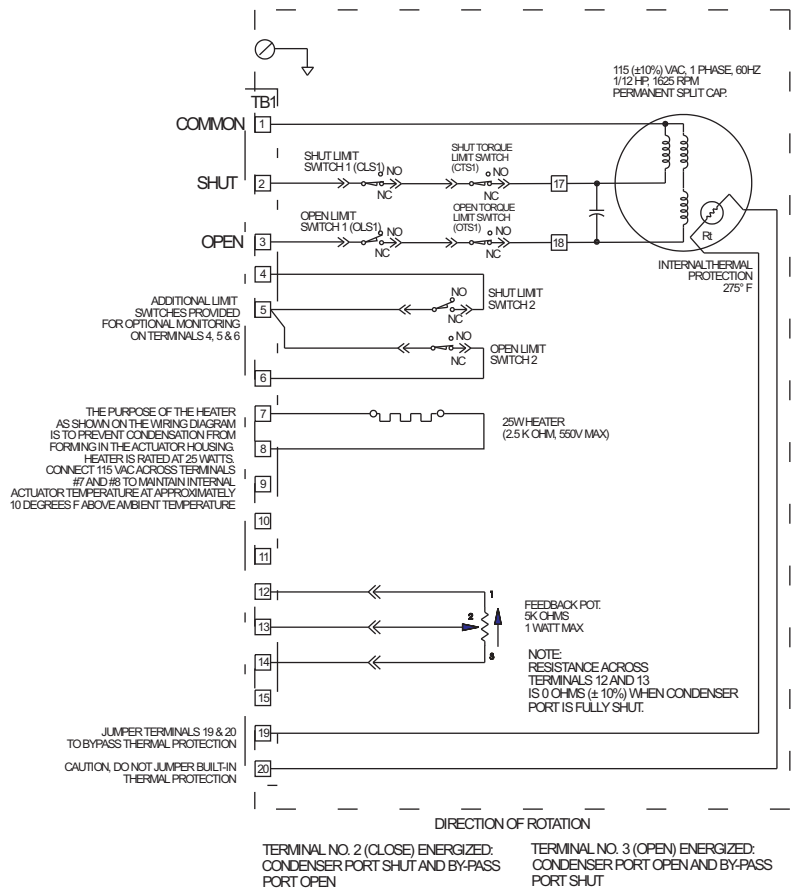
All electrical connections are provided on a single terminal block (TB1).

Mechanical stops are provided on the valve actuator as a safety feature to protect the valve from damage due to manual or automatic operation past the limits of the valve.

Electrical limit switches OLS1 and CLS1 provide the means for stopping valve rotation at its endpoints of travel. A visual position indicator on top of the actuator shows an open, closed or interim valve position.

Torque limitation is provided to protect both the motor and the valve (OTS1 and CTS1).

The actuator motor contains built-in thermal protection.



The purpose of the heater as shown in the wiring diagram is to prevent condensation from forming in the actuator housing. Heater is rated at 25 watts. Connect 115 VAC across terminals #7 & #8 to maintain internal actuator temperature at approximately 10°F above ambient temperature.

The actuator provides remote position feedback/indication via a 5000 ohm, 1 watt potentiometer. Connect circuit to terminals #12, #13 and #14 as shown in the wiring diagram. ±5 VDC is a commonly used circuit voltage.