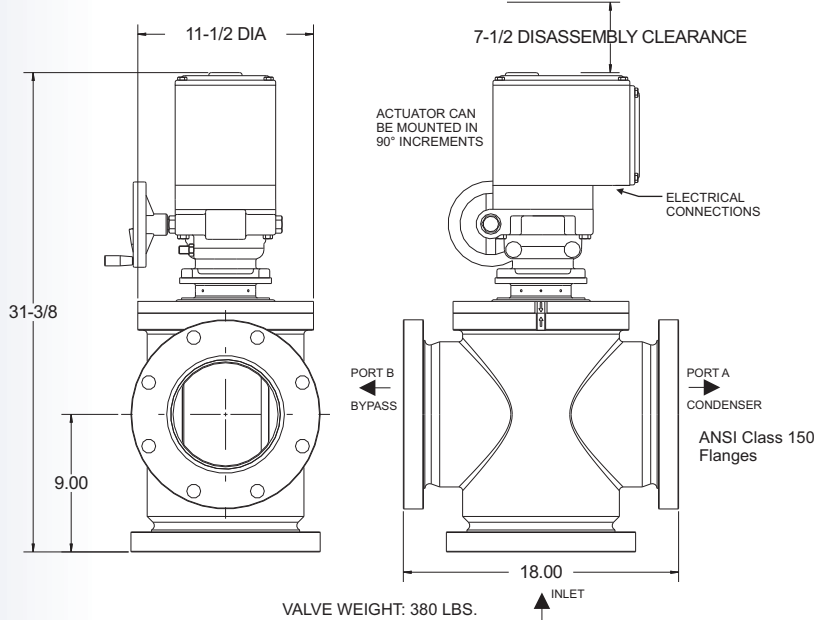


## SELECTION CRITERIA

- Fresh water service
- 115 VAC, 60Hz, 1 PH, 2.5A
- 4-20mA Positioning Control and Feedback
- Shock Qualified (MIL-S-901D)
- Vibration Qualified (MIL-STD-167)
- Cv = 900 Min.
- ANSI Class 150 Flanges
- 3-Way configuration
- 8" NPS
- 220 PSI water pressure rating
- 330 PSI proof pressure

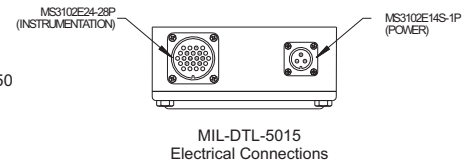
## CONSTRUCTION DETAILS

- Stainless steel internals
- Buna-N seals
- Delrin® seat seals
- Body material: Copper Nickel
- Custom materials available

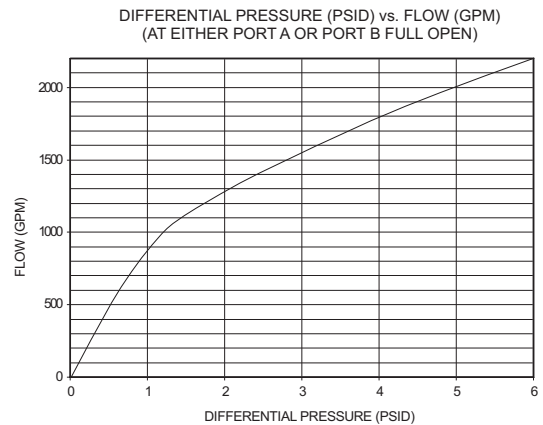
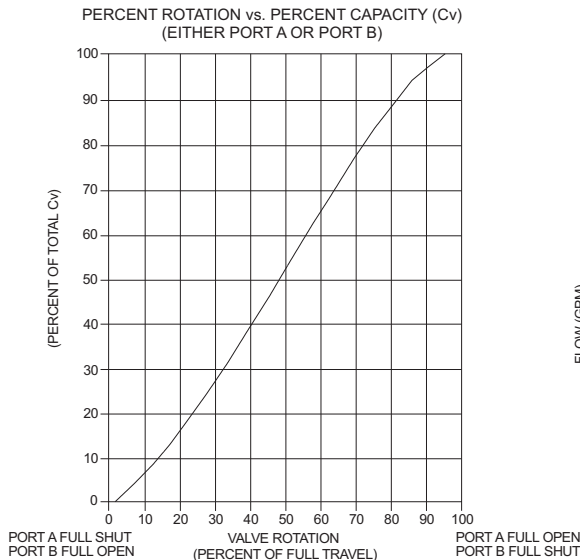


ACTUATOR PINOUT		
CONNECTOR MS3102E14S-1P (POWER)		
CONNECTOR CONTACT	TERMINATION	FUNCTION
A	TB1-1	115 VAC POWER INPUT
B	TB1-2	115 VAC POWER RETURN
C	CHASSIS	GROUND

ACTUATOR PINOUT			
CONNECTOR MS102E24-28P (INSTRUMENTATION)			
CONDUCTOR	CONNECTOR CONTACT	TERMINATION	FUNCTION
1 BLK	M	TB1-7	4-20 MA, 24VDC VALVE POSITION INPUT POSITIVE (+)
1 WHI	N	TB1-8	4-20 MA, 24VDC VALVE POSITION INPUT NEGATIVE (-)
2 BLK	T	TB1-9	4-20 MA, 24VDC VALVE POSITION FEEDBACK NEGATIVE (-)
2 WHI	S	TB1-10	4-20 MA, 24VDC VALVE POSITION FEEDBACK POSITIVE (+)
3 BLK	L	TB1-17	VALVE FULL OPEN INDICATION TO CONTROLLER
3 WHI	F	TB1-19	VALVE FULL SHUT INDICATION TO CONTROLLER
4 BLK	G	TB1-11	AUTOMANUAL DRY TOGGLE
4 WHI	H	TB1-12	"OPEN VALVE" DRY CONTACT
5 BLK	P	TB1-13	"STOP VALVE" DRY CONTACT
5 WHI	U	TB1-14	"SHUT VALVE" DRY CONTACT
6 BLK	Y	TB1-15	"BUTTON COMMON" DRY CONTACT

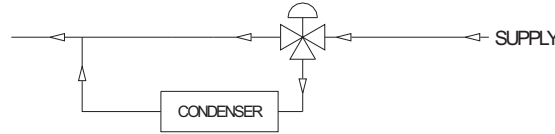


## FLOW DATA



## 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.



DIVERTING CONFIGURATION

## 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.

An orifice cylinder positions proportionally in response to a 4-20mA control signal 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.

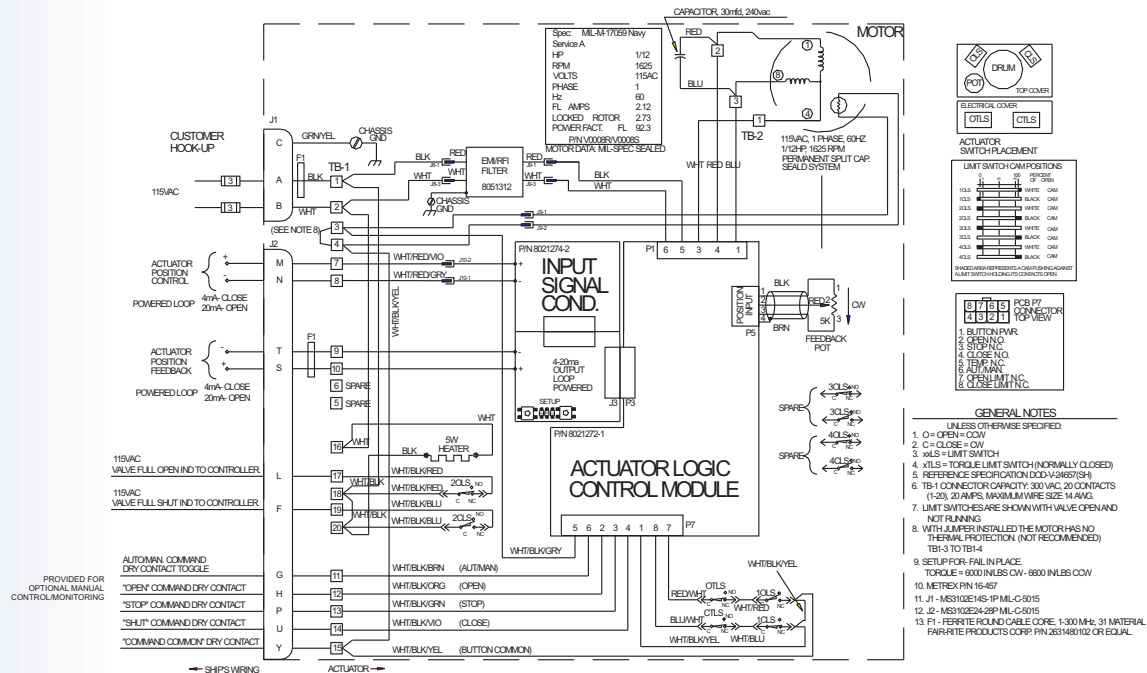
All electrical connections are provided on two MIL-DTL-5015 connectors.

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.

The actuator provides remote position indication/feedback via a 4-20mA position output module (loop powered). A visual position indicator on top of the actuator shows an open, closed or interim valve position.



ACTUATOR WIRING DIAGRAM