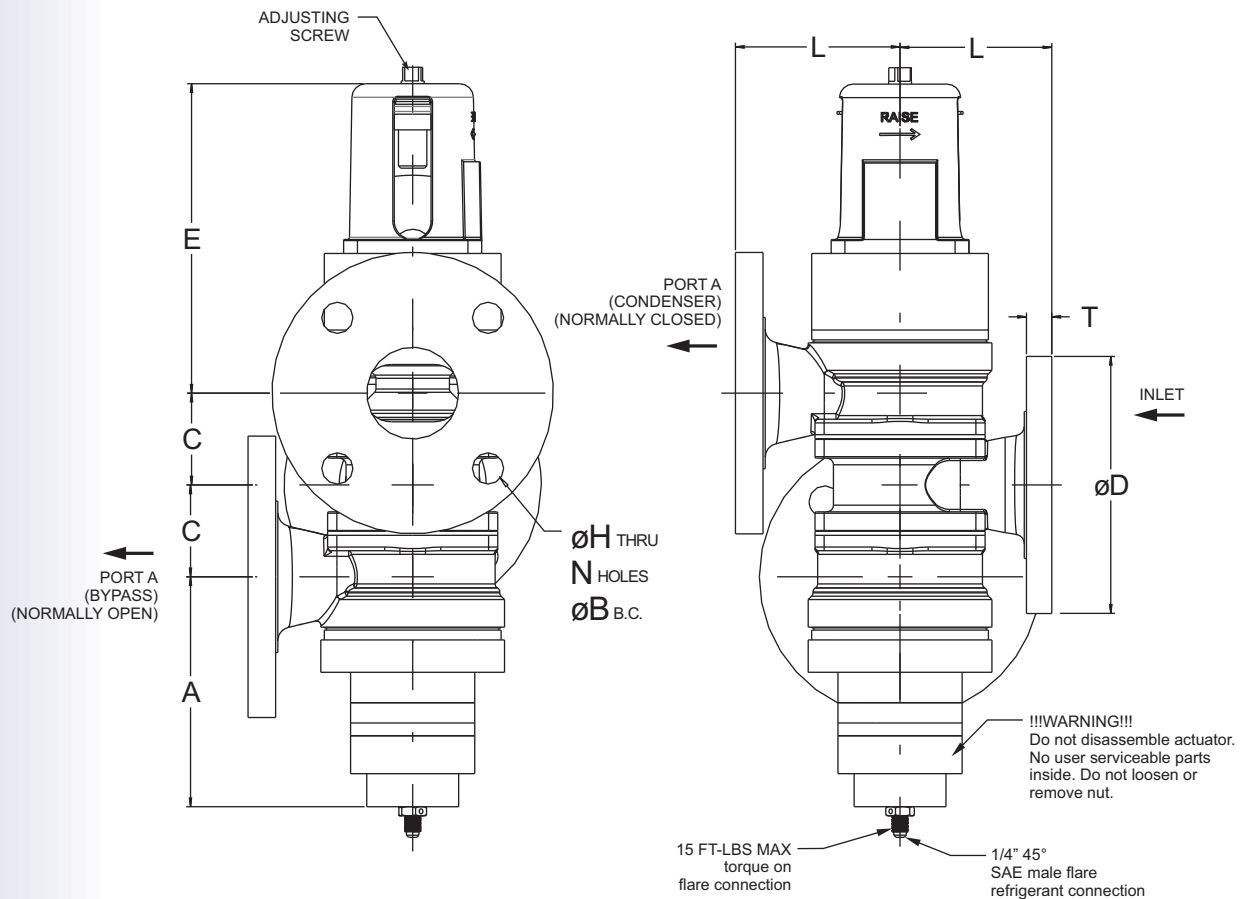


## SELECTION CRITERIA

- Fresh water use
- Direct acting
- R-410a service
- Cv=58
- Flanged end connections
- 3-Way configuration
- 2-1/2" size
- 150 PSI water pressure rating
- 650 PSI refrigerant pressure rating

## CONSTRUCTION DETAILS

- Brass & Stainless Steel internals
- Buna-N diaphragms & seals
- Body material: See Table II
- Flange: See Table II



\*NOTE: Normally closed ports open on pressure increase, normally open ports close on pressure increase.

## VALVE SIZING CHART

VALVE PART NUMBER	VALVE SIZE	C <sub>v</sub>	VALVE DIMENSIONS			
			A ±.13	C ±.06	E ±.13	L ±.06
965P-250-FL-3W	2-1/2"	58	6.25	2.50	8.32	4.13

All dimensions are in inches

## ORDERING INFORMATION

- Use the valve sizing chart on the preceding page, tables, and charts below to determine the complete part number.

**BASIC PART NO.: 365P-250- FL -3W**

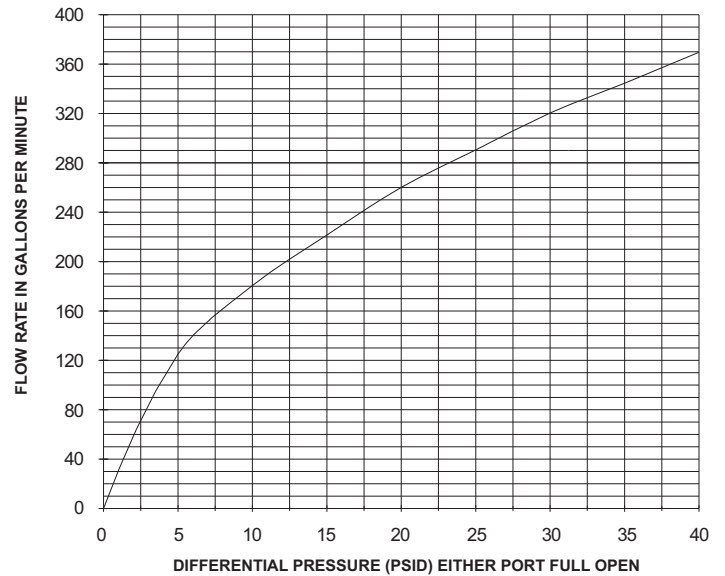
VALVE CONFIGURATION (LL, LR, UL, UR, LL/UR or LR/UL) — TABLE II (1 or 2)

**EXAMPLE:**  
365P-250-ULFL1-3W  
Upper port (Port A) to the left configuration  
ANSI B16.1 Cast iron body

## PRESSURE RANGE ADJUSTMENT

- The refrigerant pressure range at which the valve begins to open can be adjusted from approximately 180 to 340 PSIG. An increase in refrigerant pressure of approximately 60-65 PSIG is required to fully open Port A.

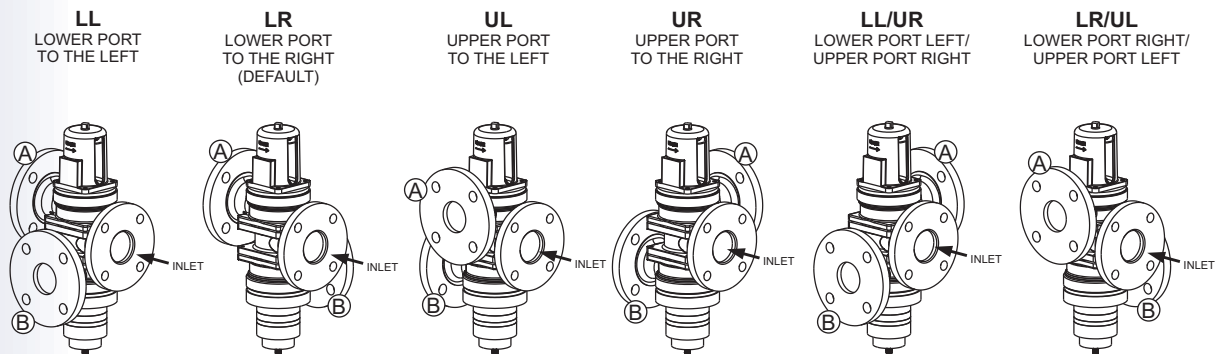
VALVE FLOW DATA



## BODY OPTIONS

TABLE II									
ASSEMBLY NUMBER	MATERIAL	FLANGE SPECIFICATION	DESIGN PRESS.	PROOF PRESS.	FLANGE DIMENSIONS				
					N	H	B	D	T
-250_FL1-	CAST IRON	ANSI B16.1 CLASS 125 LB.	150 PSI	225 PSI	4	0.75"	5.50"	7.00"	0.69"
-250_FL2-	BRONZE	ANSI B16.24 CLASS 150 LB.	150 PSI	225 PSI	4	0.75"	5.50"	7.00"	0.56"

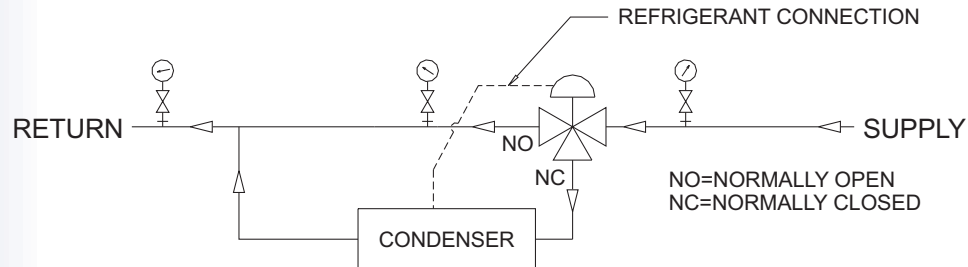
## VALVE CONFIGURATION



## 3-WAY HEAD PRESSURE REGULATOR TYPICAL APPLICATION

PAGE 3 OF 3

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



## INSTALLATION INSTRUCTIONS

- Valves can be mounted in any position without affecting performance. However, for ease of adjustment consider the accessibility of the adjusting screw.
- Connect the incoming water line to the valve inlet. Direction of water flow is indicated by the arrow cast on the side of the valve body. Port A (normally closed) is typically piped to the condenser inlet. Port B should be piped to bypass the condenser.
- Connect refrigerant connection capillary to refrigerant pressure connection on the condenser.
- See Metrex datasheet 50M-366 for available capillary assemblies for connecting the valve.
- Do not disassemble actuator. There are no user serviceable parts inside the actuator.

## GENERAL DESCRIPTION

- The 365 series valves are direct acting, modulating water regulating valves utilizing a diaphragm construction to give smooth, well balanced action. The pressure-balanced design and low frictional coefficient of the diaphragms assure fast response to changes in refrigerant pressure and protection against both gradual and sudden water pressure changes. All sliding parts and adjustment springs are isolated from the water flow by the leak proof diaphragms. This valve has an increased capacity over similar 2-1/2" valves with a Cv of 58. The actuator is designed for use with R-410a and is rated at a full 650 PSIG.

## ADJUSTMENT

- The 365 series are suitable for R-410a service. The refrigerant pressure at which the Port A begins to open (and Port B begins to close) can be adjusted between 180 and 340. A 60-65 PSI increase of refrigerant pressure is required to fully open Port A (fully shut Port B).

To adjust condensing head pressure, use the adjusting screw on top of the spring housing. Turn counter clockwise to raise the opening point (raise head pressure). Turn clockwise to lower the opening point (lower head pressure).