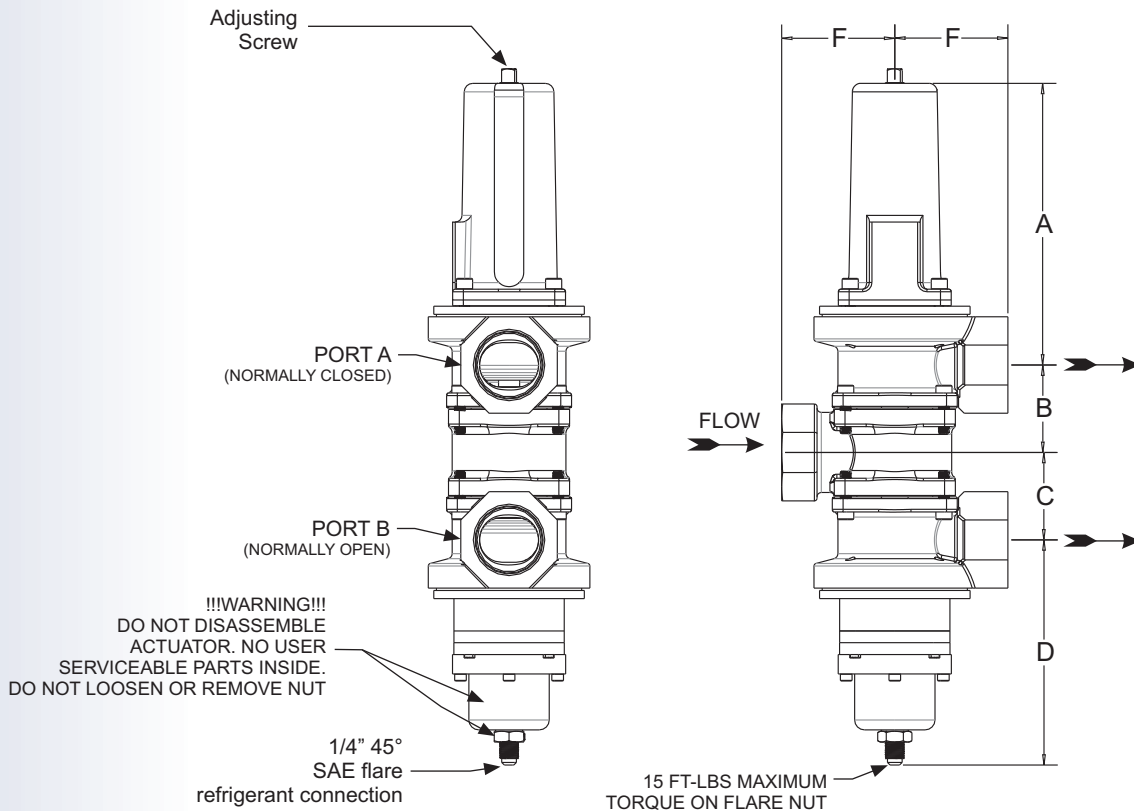


SELECTION CRITERIA

- Fresh water use
- Direct acting
- Patented 650 PSI rated actuator
- For R410a refrigerant applications
- Screwed end connections NPT
- 3-Way configuration
- 1", 1-1/4" & 1-1/2" sizes
- 150 PSI water pressure

CONSTRUCTION DETAILS

- Brass & stainless steel internals
- Buna-N diaphragms & seals
- Brass body



VALVE SIZING CHART

VALVE PART NUMBER	PIPE SIZE	C _v	DIMENSIONS					APPROX. SHIP WT.
			A	B	C	D	F	
965P-100_SE-3W	1"	11	6.19	1.75	1.75	4.89	2.38	15#
965P-125_SE-3W	1-1/4"	14.5	6.54	2.03	2.03	5.23	2.63	18#
965P-150_SE-3W	1-1/2"	17	6.65	2.22	2.22	5.35	2.75	20#

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.: 965P- 1 - SE -3W

VALVE SIZING CHART (100, 125, 150) ——— VALVE CONFIGURATION
SET POINT RANGE (Table II) ———

EXAMPLE: • "125" = 1-1/4" pipe size
965P-1251-LRSE-3W • "1" = R410a range
• "LR" = Lower port to the right

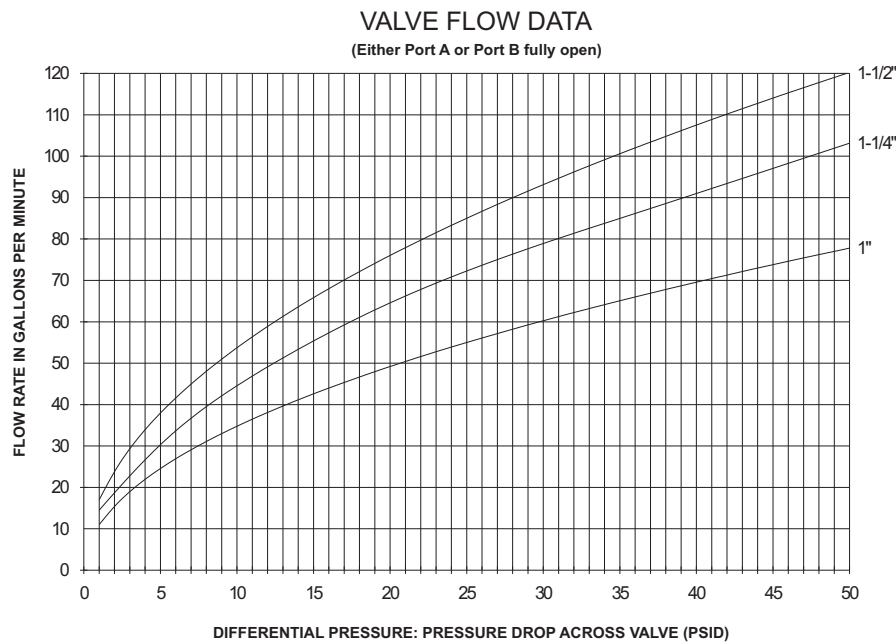
PRESSURE RANGE ADJUSTMENT

- The refrigerant pressure range which the valve begins to open can be adjusted per table II. An approximate increase of refrigerant pressure (span) per Table II is required to open the valve fully.

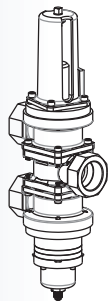
SET POINT RANGE	ADJUSTMENT	SPAN
1	170-330	55
2	TBD	TBD

All pressures are PSIG

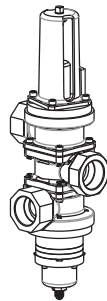
FLOW DATA



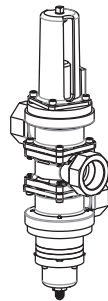
VALVE CONFIGURATION



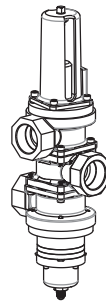
"BP"
BOTH PORTS
PARALLEL
(STANDARD)



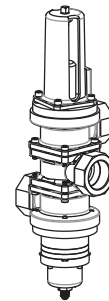
"LL"
LOWER PORT
TO LEFT



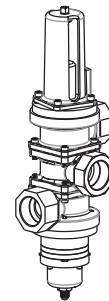
"LR"
LOWER PORT
TO RIGHT



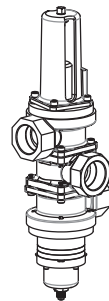
"UL"
UPPER PORT
TO LEFT



"UR"
UPPER PORT
TO RIGHT



"LL/UR"
LOWER PORT
TO LEFT
UPPER PORT
TO RIGHT

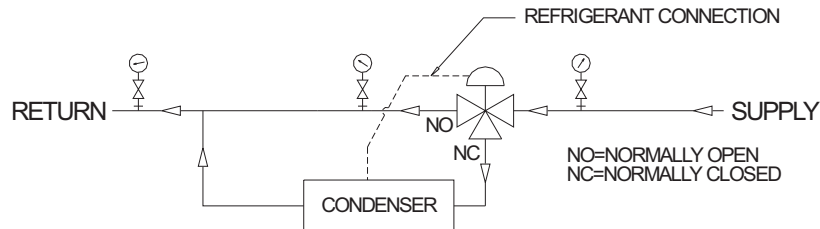


"LR/UL"
LOWER PORT
TO RIGHT
UPPER PORT
TO LEFT

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 1/4" male flare fitting on valve actuator to refrigerant head pressure connection on condenser. Use 1/4" copper refrigerant tubing, capillary tubing or other suitable tubing with 1/4" flare nut connection. Tubing not included with valve. Maximum tightening torque on flare nut is 15 in-lbs.
- 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 965P series valves are direct acting, modulating water regulating valves utilizing internal diaphragm construction to give a smooth, well balanced action. The pressure-balanced design assures fast response to changes in refrigerant pressure and protection against both gradual and sudden water pressure changes. The robust design provides set & forget reliability. The 965P series is rated at 650 PSI refrigerant pressure for R410a service. Port A opens in direct response to refrigerant pressure. As Port A opens, Port B closes proportionally.

ADJUSTMENT

- All valve sizes are multi-range valves applicable to various refrigerants. The refrigerant pressure at which the valve begins to open can be adjusted as shown in Table II. An approximate increase in refrigerant pressure is required to fully open Port A is also listed in Table II.

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

MANUAL FLUSHING

- All valves may be manually flushed by inserting a screwdriver in openings at opposite sides of the spring housing and lifting the lower spring plate to open the valve. The valve adjustment is not affected by manual flushing.

