

565P-SE-31

3-WAY DIRECT ACTING HIGH REFRIGERANT PRESSURE HIGH WATER PRESSURE REGULATING VALVE

SELECTION CRITERIA

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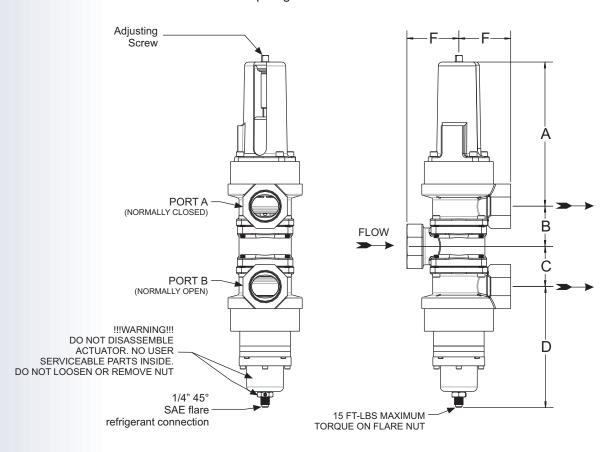
- Fresh water use
- Direct acting
- Patented 650 PSI rated actuator
- For R410a refrigerant applications
- Screwed end connections NPT
- 3-Way configuration
- 1-1/4" & 1-1/2" sizes
- 350 PSI water pressure standard
- Available water pressure to 500 PSI

CONSTRUCTION DETAILS _____

Brass & stainless steel internals

Buna-N diaphragms & seals

Brass body



VALVE SIZING CHART & PRESSURE RATING .

VALVE PART	PIPE	C	DIMENSI					APPROX.
NUMBER	SIZE	9	Α	В	С	D	F	SHIP WT.
565P-125SE-3W	1-1/4"	14.5	7.29	2.03	2.03	6.12	2.63	19#
565P-150SE-3W	1-1/2"	17	7.41	2.22	2.22	6.24	2.75	24#

ΑII	dimensions	are	in	inches

TABLE I					
WATER PRESSURE	STANDARD	Н	EH		
DESIGN PRESSURE	350	450	500		
PROOF PREESURE	525	675	750		

All values are PSIG



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ORDERING INFORMATION _

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

BASIC PART NO.: 565P-VALVE SIZING CHART (125, 150) -**VALVE** SET POINT RANGE ("1" for R410a) CONFIGURATION TABLE I ("H" OR "EH") -

EXAMPLE: • "125" = 1-1/4" pipe size

565P-1251H-LRSE-3W • "1" = R410a range

• "H" = 450 PSI water pressure

• "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.

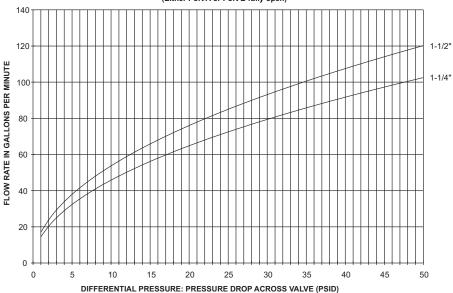
TABLE II					
SET POINT RANGE	ADJUSTMENT	SPAN			
1	170-330	55			
2	TBD	TBD			

All pressures are PSIG

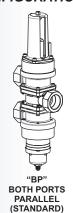
FLOW DATA

VALVE FLOW DATA

(Either Port A or Port B fully open)

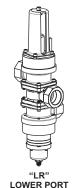


VALVE CONFIGURATION





TO LEFT







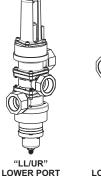
TO RIGHT



TO LEFT

UPPER PORT

TO RIGHT



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

METREX VALVE CORP. ENGINEERED CONTROL SOLUTIONS FOR HVAC • REFRIGERATION •

TO RIGHT

MARINE

NUCLEAR



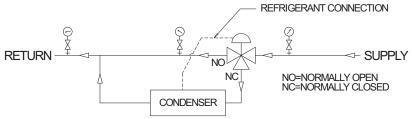
565P-SE-3

3-WAY DIRECT ACTING HIGH REFRIGERANT PRESSURE HIGH WATER PRESSURE REGULATING VALVE

3-WAY HEAD PRESSURE REGULATOR TYPICAL APPLICATION _

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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 _

- 1) Valves can be mounted in any position without affecting performance. However, for ease of adjustment consider the accessibility of the adjusting screw.
- 2) 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.
- 3) 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.
- 4) See Metrex datasheet 50M-366 for available capillary assemblies for connecting the valve.
- 5) Do not disassemble actuator. There are no user serviceable parts inside the actuator.

GENERAL DESCRIPTION _

 The 565P series valves are high water pressure, 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. All water pressure boundaries are o-ring sealed for leak-proof, set & forget reliability. The 565P 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.

