METREX VALVE

93PH Series

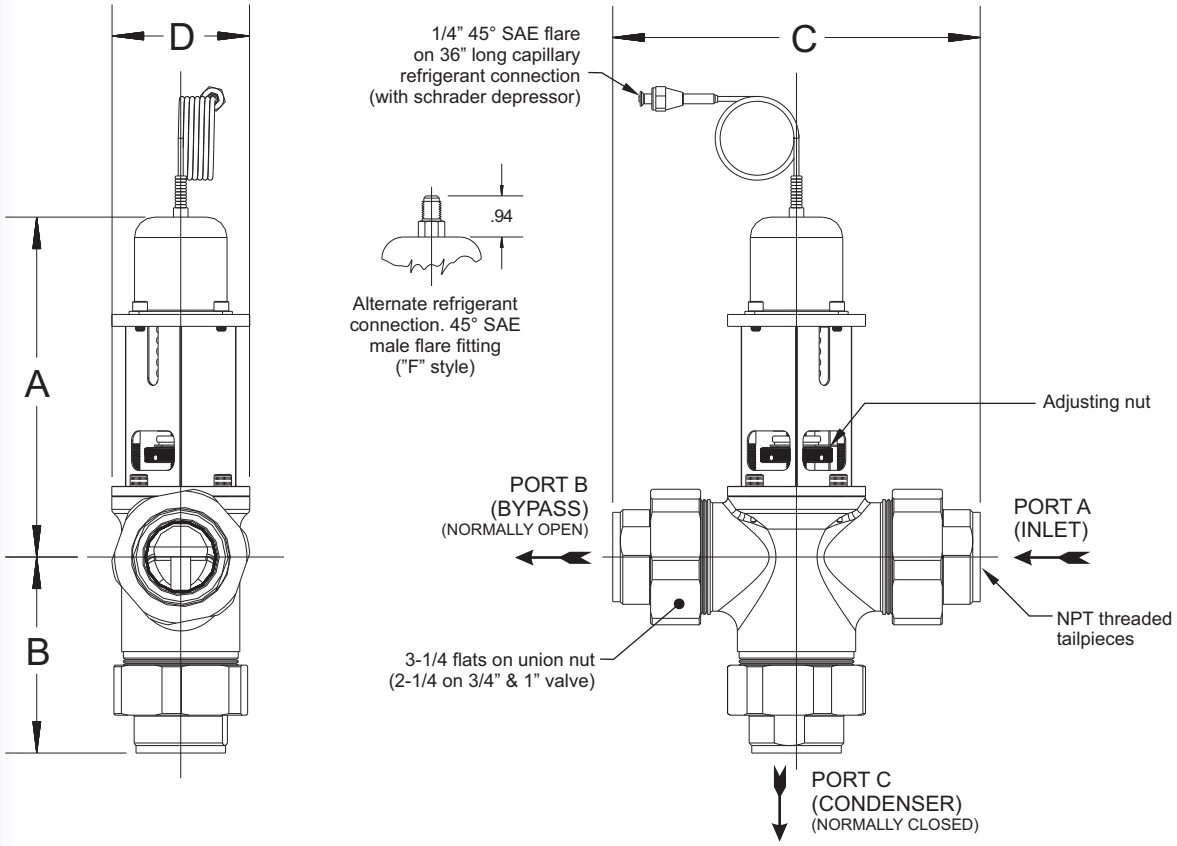
3-WAY DIRECT ACTING
HIGH WATER PRESSURE
REGULATING VALVE

SELECTION CRITERIA

- Fresh water use
- Direct acting
- High water pressure
- O-Ring seals
- Union connections
- 3-Way diverting configuration
- 3/4", 1", 1-1/4" & 1-1/2" sizes
- 350 PSI water pressure rating
- Optional 500 PSI water pressure rating

CONSTRUCTION DETAILS

- Brass & stainless steel internals
- Cast iron body
- Buna-N o-ring seals



VALVE SIZING & RATING CHARTS

VALVE PART NUMBER	PIPE SIZE	C_V MIN PORT C / PORT B	DIMENSIONS A ± .12	B ± .06	C ± .12	D ± .06	APPROX. WEIGHT
93P_H_-75-_	3/4"	11/11	8.65	3.87	7.93	3.50	13#
93P_H_-100-_	1"	11/11	8.65	3.87	7.93	3.50	13#
93P_H_-125-_	1-1/4"	14.5/11	8.65	5.00	9.38	3.50	17#
93P_H_-150-_	1-1/2"	17/14.5	8.65	5.00	9.38	3.50	19#

All dimensions are in inches

WATER PRESSURE RATING	
BASE PART NO	RATING
93PH	350 PSIG
93PEH	500 PSIG

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ORDERING INFORMATION

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

BASIC PART NO.: 93P_H_ - ___ - __

500 PSI option (add "E")
Male flare bellows (add "F")
Size ("75", "100", "125", "150")
Set point range ("1", "2")

Example: • **93PH-125-2**
- Standard 350 PSI rating
- Standard capillary w/flare nut
- "125" = 1-1/4" pipe size
- "2" = 150-220 set point range

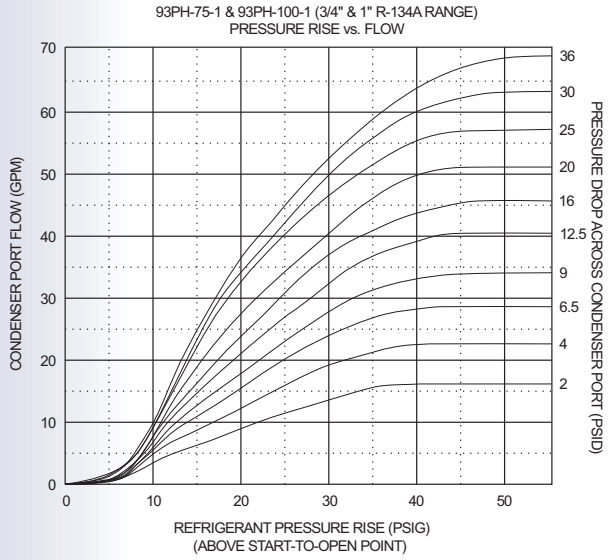
PRESSURE RANGE ADJUSTMENT

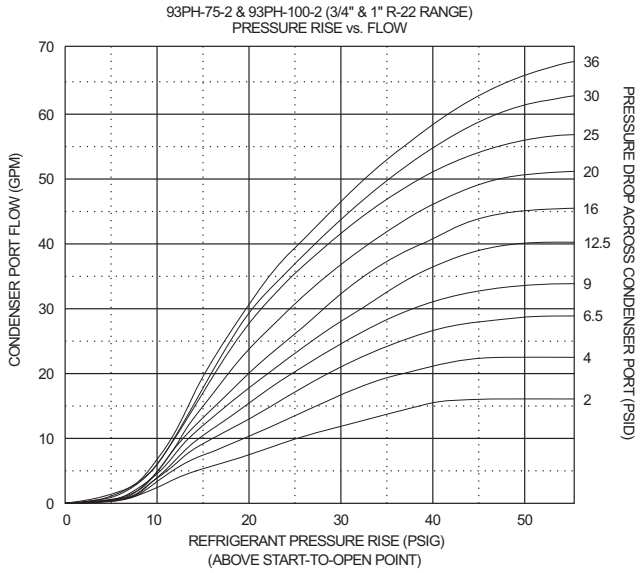
- The refrigerant pressure range at which Port C begins to open can be adjusted per Table I.

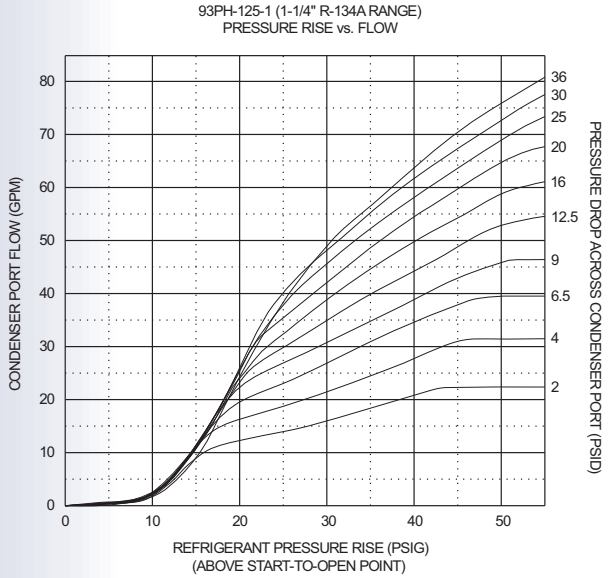
TABLE I

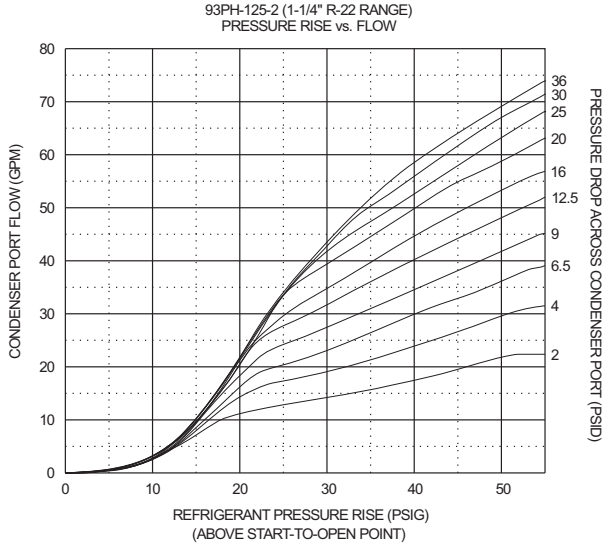
SET POINT RANGE	ADJUSTMENT
1	70-150 PSIG
2	150-220 PSIG

FLOW DATA









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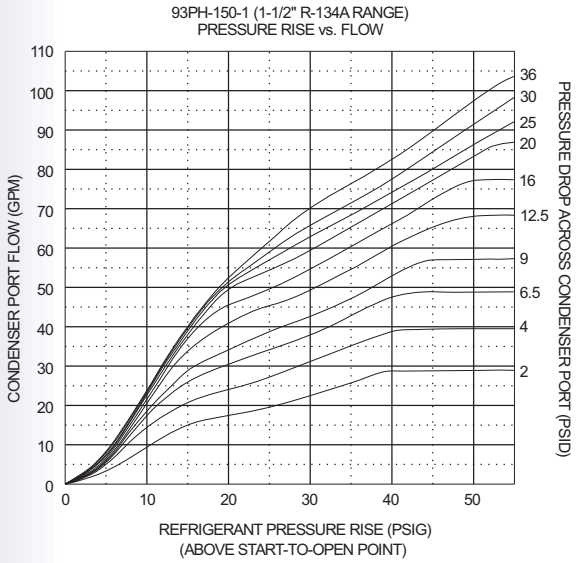
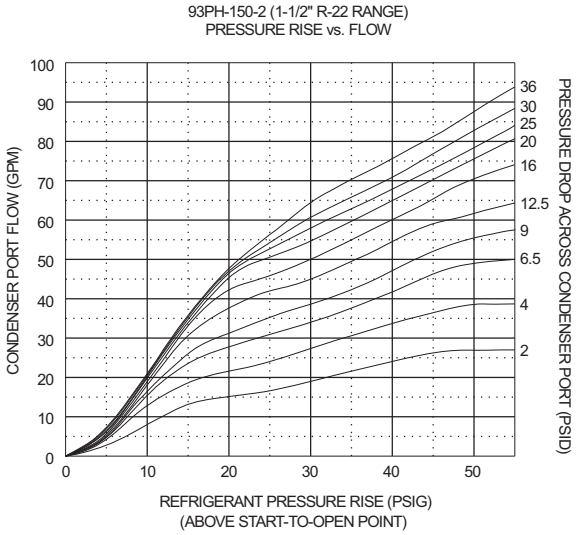
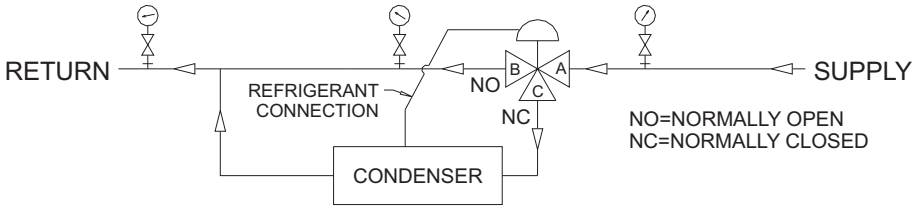




3-WAY HEAD PRESSURE REGULATOR TYPICAL APPLICATION

- 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 nut.
2) Connect the incoming water line to the valve inlet (Port A). Direction of water flow is indicated by the arrow cast on the side of the valve body. Port C (normally closed) is typically piped to the condenser inlet. Port B should be piped to bypass the condenser.
3) Connect refrigerant connection capillary to refrigerant pressure connection on the condenser.

ADJUSTMENT

- The refrigerant pressure at which Port C begins to open can be adjusted as shown in Table I. Port B closes proportionally as Port C opens. To increase the refrigerant head pressure setting, insert a 1/8” pin or hex key into the adjustment nut and turn counter-clockwise. To lower refrigerant head pressure setting, turn adjustment nut clockwise.

GENERAL DESCRIPTION

- The 93PH series valves are high pressure, direct acting, modulating water regulating valves. All water pressure boundaries are o-ring sealed for leak-proof, set & forget reliability. Union ends with special o-ring seals make for quick and easy installation.

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