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## **S**ELECTION CRITERIA

- Fresh water use
- Direct acting
- High capacity
- O-Ring seals
- Low maintenance

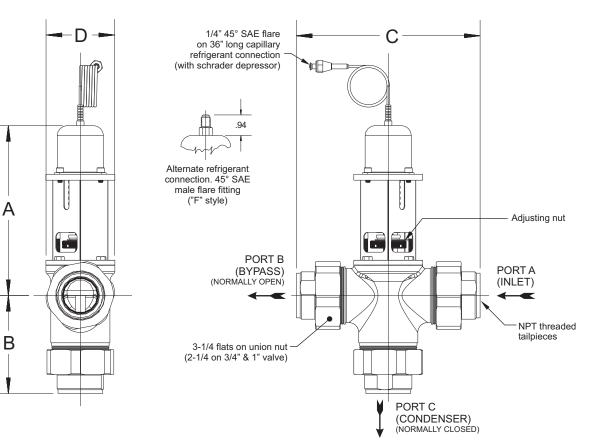
Union connections3-Way diverting configuration

Cast iron body

- 3/4", 1", 1-1/4" & 1-1/2" sizes
- 200 PSI water pressure standard
- Higher water pressures available

### CONSTRUCTION DETAILS

- Brass & stainless steel internals
- Buna-N o-ring seals



### VALVE SIZING CHART .

| VALVE PART | PIPE<br>SIZE | C <sub>v</sub> MIN<br>PORT C<br>PORT B | DIMENSIONS     |                |        |        | APPROX. |
|------------|--------------|--|----------------|----------------|--------|--------|---------|
| NUMBER     |              |  | <b>A</b> ± .12 | <b>B</b> ± .06 | C ±.12 | D ±.06 | WEIGHT  |
| 93P75      | 3/4"         | <u>11</u><br>11                        | 8.65           | 3.87           | 7.93   | 3.50   | 13#     |
| 93P100     | 1"           | <u>11</u><br>11                        | 8.65           | 3.87           | 7.93   | 3.50   | 13#     |
| 93P125     | 1-1/4"       | <u>14.5</u><br>11                      | 8.65           | 5.00           | 9.38   | 3.50   | 17#     |
| 93P150     | 1-1/2"       | $\frac{17}{14.5}$                      | 8.65           | 5.00           | 9.38   | 3.50   | 19#     |



All dimensions are in inches

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#### **O**RDERING INFORMATION

40

30

20

10

0

0

10

20

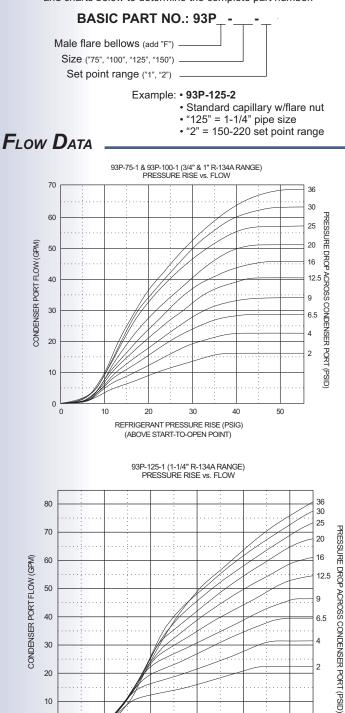
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REFRIGERANT PRESSURE RISE (PSIG)

(ABOVE START-TO-OPEN POINT)

40

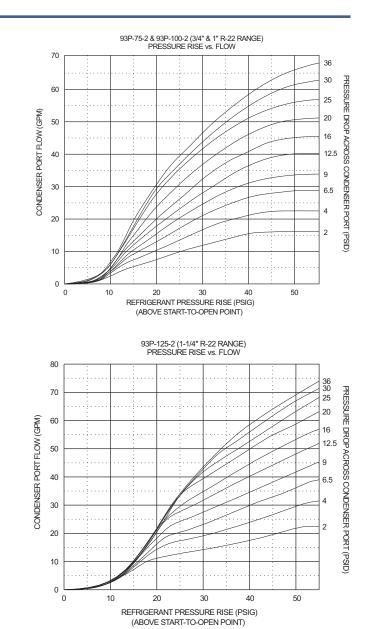
 Use the valve sizing chart on the preceding page, tables, and charts below to determine the complete part number.



#### 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 |  |  |  |



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6.5

Δ

2

50

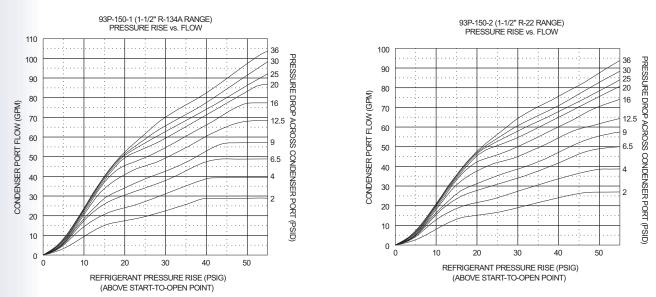
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# METREXVALVE

3-WAY DIRECT ACTING WATER REGULATING VALVE

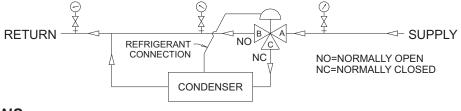
## FLOW DATA

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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 93P series valves are 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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