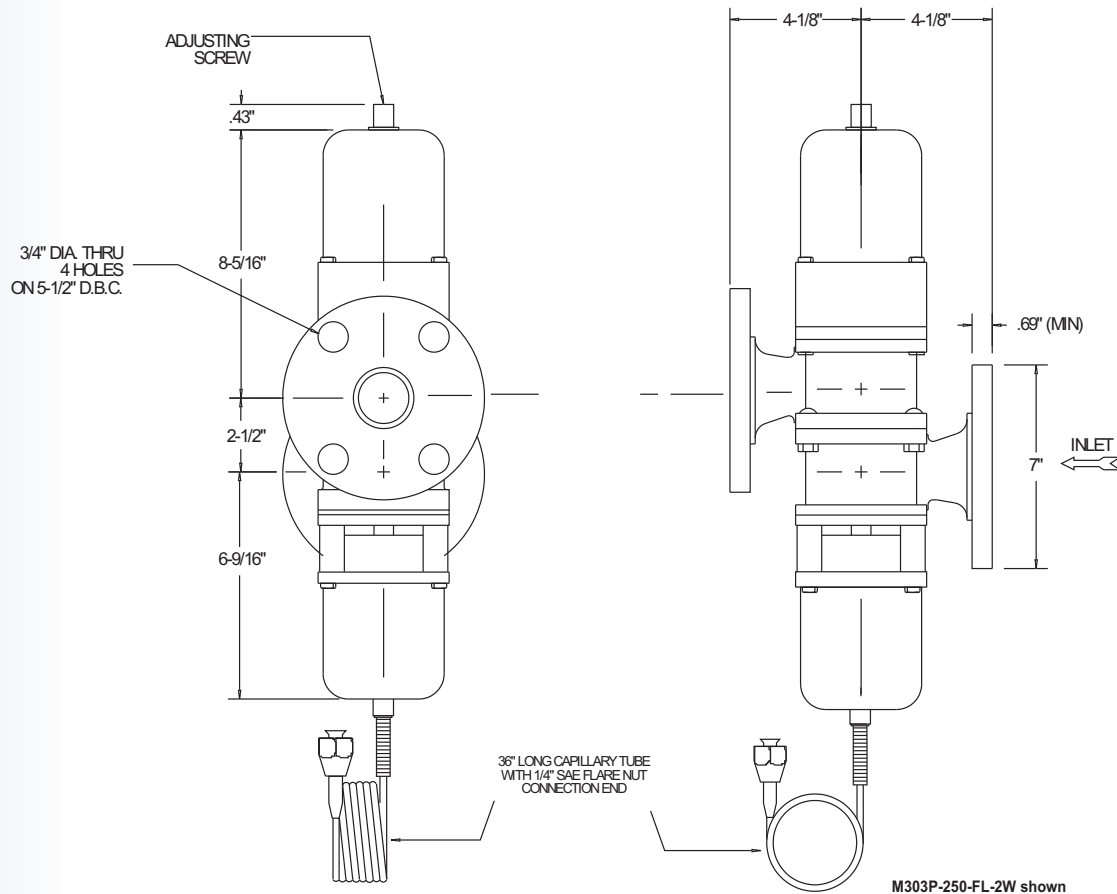


## SELECTION CRITERIA

- Marine use
- Direct acting
- Actuation by pressure
- Cv = 60
- Flanged end connections
- 2-Way configuration
- 2-1/2" NPS
- 150 PSI water pressure rating
- 225 PSI proof pressure

## CONSTRUCTION DETAILS

- Monel internals
- Buna-N diaphragms & seals
- Body material: Bronze
- Flange: ANSI B16.24 150# Class
- MIL-PRF-20042 flanges available



## ORDERING INFORMATION

- Use the valve sizing chart on the preceding page to determine the complete part number.

**BASIC PART NO.: M30 P - 250 - - -2W**

ADJ. RANGE (TABLE I)

VALVE CONFIGURATION

"FL" FOR ANSI FLANGE

"NF1" FOR MIL-PRF-20042 150# FLANGE

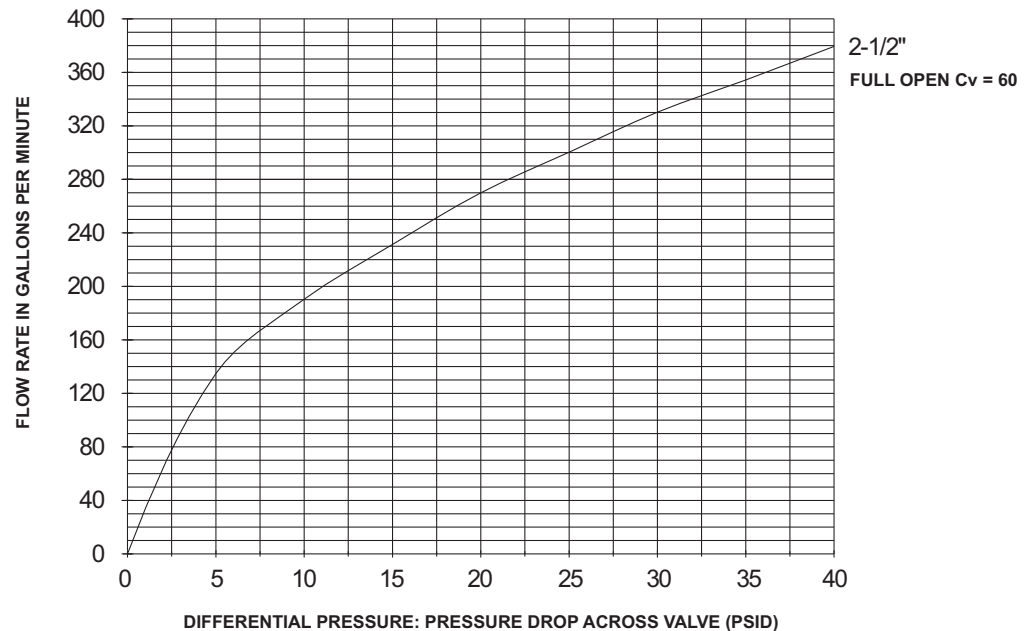
"NF2" FOR MIL-PRF-20042 250# FLANGE

ASSEMBLY NUMBER	CRACK POINT ADJ. RANGE	PRESS. RISE FOR FULL OPEN
M301P	40 to 120	35 PSI
M303P	90 to 225	45 PSI

**EXAMPLE: M303P-250-R-NF1-2W**

90-225 ADJ. RANGE, OUTLET PORT TO THE RIGHT, MIL-PRF-20042 150# FLANGE

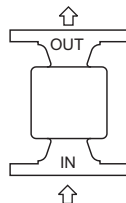
## FLOW DATA



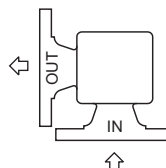
## VALVE CONFIGURATION

LOOKING DOWN  
AT TOP OF VALVE  
AS SHOWN ON PAGE 1

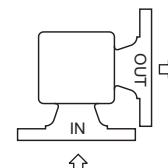
**NO DESIGNATOR**  
OUTLET PARALLEL



**L**  
OUTLET TO  
THE LEFT



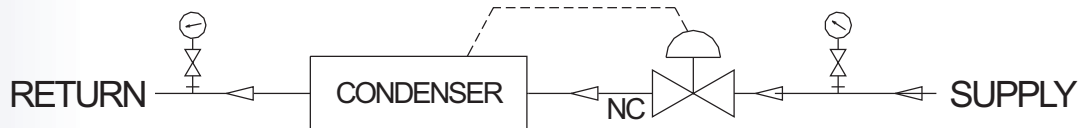
**R**  
OUTLET TO  
THE RIGHT



## 2-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 (see drawing) is indicated by the arrow cast on the side of the valve body.
- Connect capillary tube (1/4" flare nut) to refrigerant head pressure connection on condenser.

## GENERAL DESCRIPTION

- The M300 series valves are direct acting, modulating water regulating valves utilizing a diaphragm construction to give a smooth, well balanced action. The pressure-balanced design and low frictional co-efficient of the diaphragm 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.

## ADJUSTMENT

- The M300P 2-1/2" Valve is multi-range valves applicable to both R-134a and R-22 service. The refrigerant pressure at which the valve begins to open can be adjusted from (see Table I).

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).

## MANUAL OVERRIDE

- 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.

