



SINGER MODEL 106/206F-V
NON-MODULATING FLOAT VALVE
SCHEMATIC A-0421B

DESCRIPTION:

The SINGER Series 106/206F-V is a pilot operated float valve, for applications requiring the valve to open and close at predetermined high and low levels. Valve action is on-off with no intermediate throttling positions.

The main valve is installed in the line going directly into the base or top of the tank. The pilot is a float operated three way valve which controls the flow into or out of the main valve bonnet. A needle valve on the bonnet provides opening and closing speed adjustment.

DESCRIPTION OF OPERATION:

The valve is normally open when pressure is applied to the valve inlet. When this same pressure is applied to the bonnet, the valve closes tight because the area of the diaphragm is greater than the area of the seat. Pressure above the diaphragm determines the position of the main valve.

Bonnet pressure is controlled by Float Pilot (5).

Pilot valve (5) is operated directly by a float riding on the liquid surface. The float moves freely up and down on a rod, operating the pilot valve only when it contacts the stops fastened to the rod. Line pressure is directed into the main valve cover chamber to close it and exhausted to open it.

Unless otherwise specified, this valve will be assembled for service temperatures to 140° F. Higher temperature ratings are available.

INSTALLATION:

Pilot Valve:

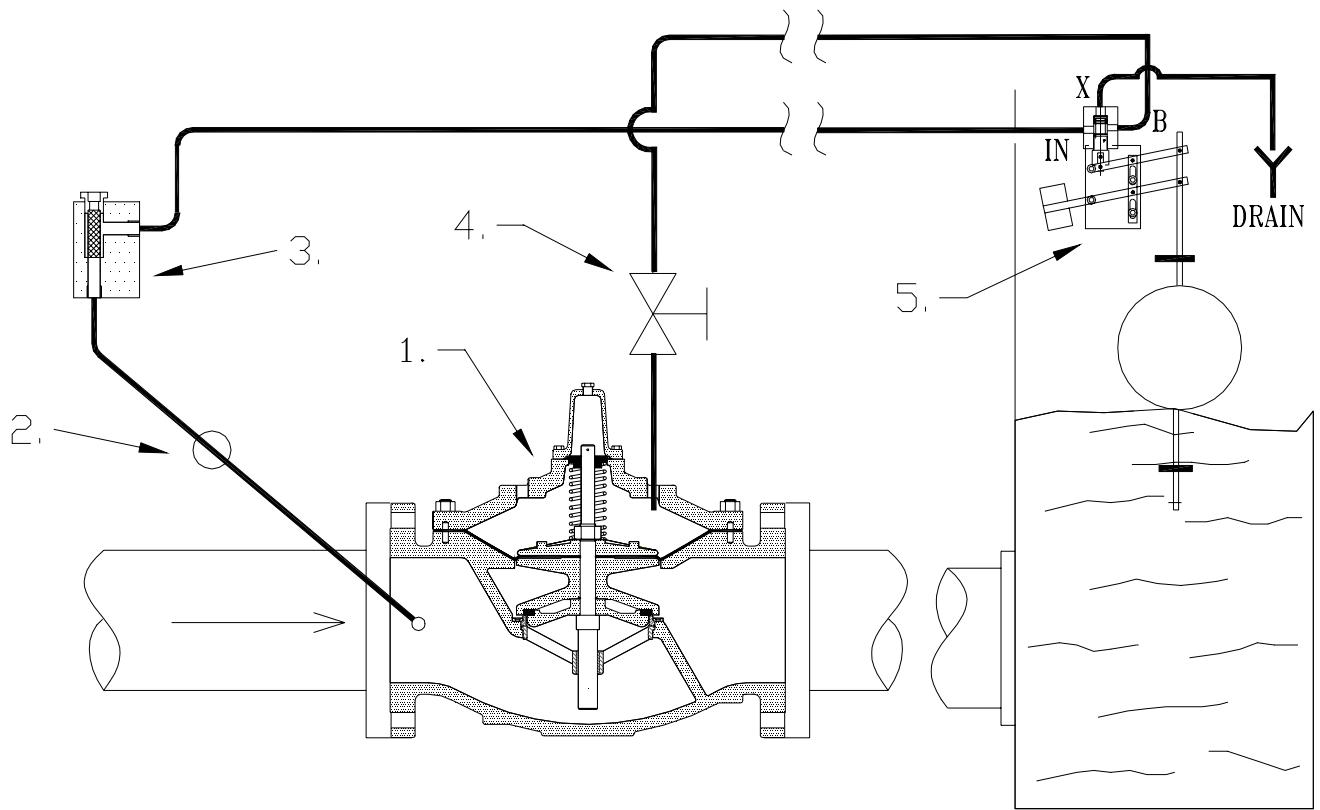
Take care when making the installation to avoid damage to the pilot control system. If it is necessary to remove any fittings, make sure they are kept clean and replaced correctly.

Install the float pilot in a convenient location. The connecting piping between the main valve and the pilot control should be at least 1/4" pipe or equivalent tubing. Brass pipe or copper tubing is recommended. Be sure the float rod is absolutely vertical and pilot valve lever and counterweight lever must be parallel, so that float rod remains parallel throughout the full movement of pilot valve linkage.

NOTE - IMPORTANT: Counterweight should be adjusted into such a position, that the float rod is perfectly balanced and the pilot linkage will stay in any position. To check this, hold the float off the stops and move the linkage slowly through the full travel. It should stay in any position without any tendency to move on its own.

ADJUSTMENT PROCEDURE:

1. Check setting of needle valve; it should be initially set at one turn open.
2. Adjust upper and lower float stops at desired shut off and open positions.
3. Open isolating valves and manually operate pilot valve, observing action on valve indicator or liquid level change.
4. Raise and lower level several times to cause valve to operate. Adjust needle valve opening and closing rate to optimum setting. Do not close needle valve tight as this will cause main valve to be inoperative.



1. Singer Model 106/206-PG Main Valve.
2. Isolating Valve.
3. Strainer - 40 mesh - J0098A.
4. Speed Control Valve - model 852-B.
5. Model 39 Float Pilot (ON-OFF with differential control).

SINGER MODEL 106/206-F-V

Non-Modulating Float Valve with Differential Control.

SINGER VALVE INC.

12850-87th Ave
Surrey, BC V3W 3H9

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