



## MARK 53 AND PUMPS

A reason for using a bypass valve with this type of pump is the flashing that occurs with most liquids, if the pressure differential across the supply and discharge sides of the pump falls below a set point. Flashing can cause cavitation BPRV such as the Mark 53 is installed as shown above.

In this illustration, the Mark 53 is normally closed. The pump discharge pressure acts beneath the diaphragm. It is opposed by the force of the adjusting spring plus the pump supply pressure. As the pump discharge pressure builds up and overcomes the set point, the Mark 53 throttles to the open position, relieving the necessary capacity to the supply side of the pump to maintain the set point and prevent flashing.