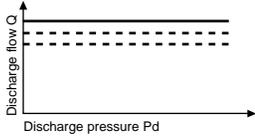
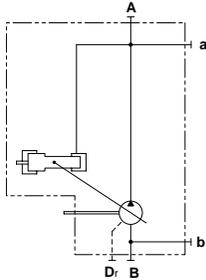
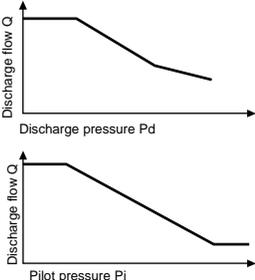
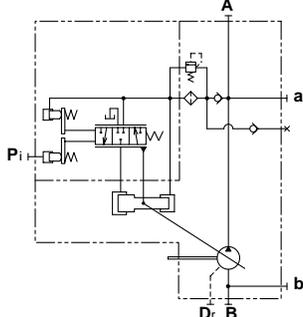
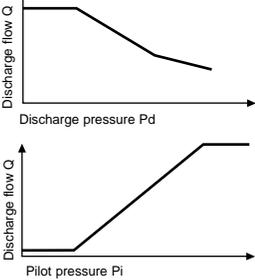
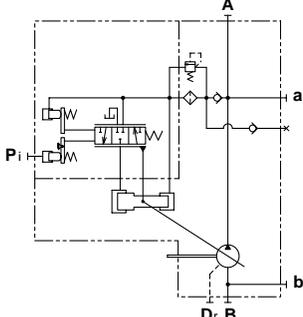
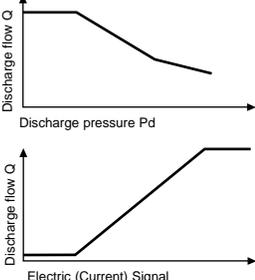
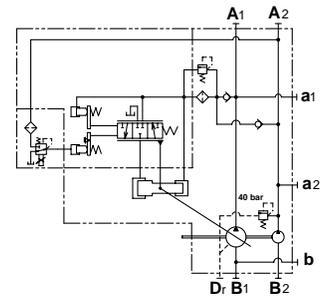
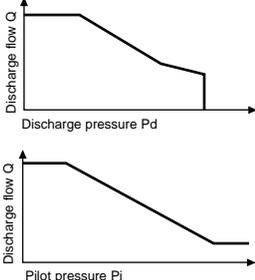
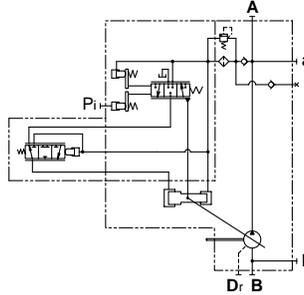
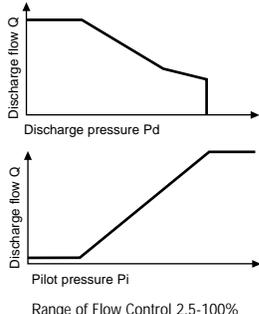
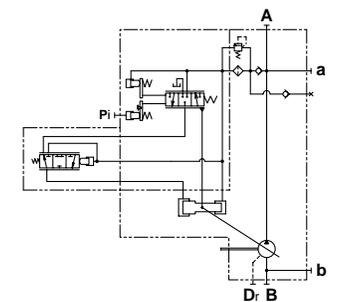
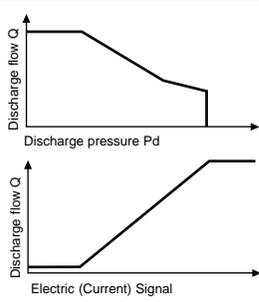
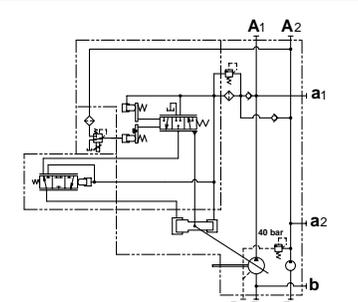
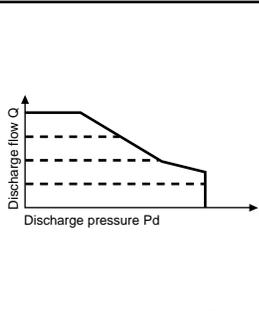
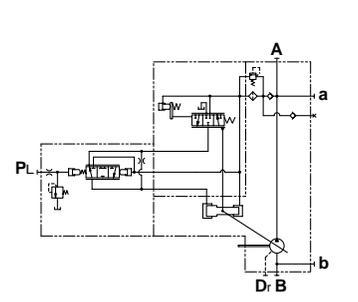
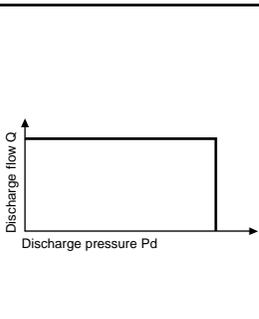
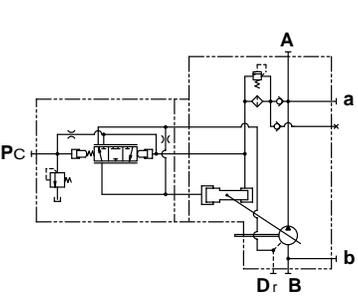
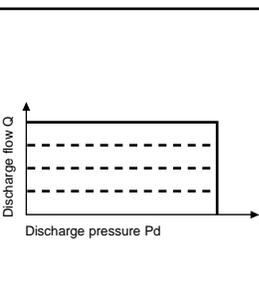
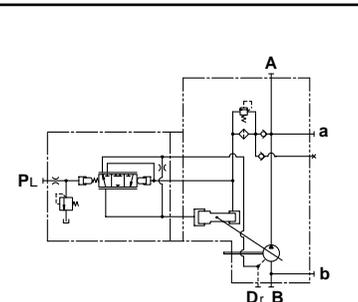


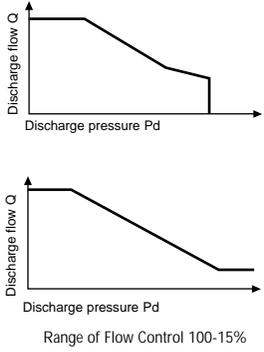
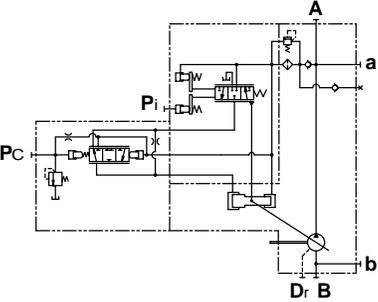
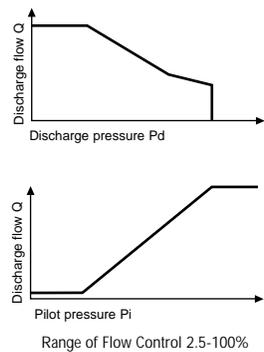
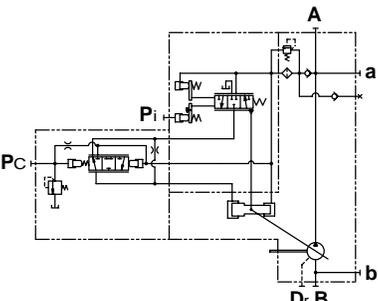
# FUNCTIONAL DESCRIPTION OF REGULATORS

Regulator Code	Control Curves	Hydraulic Circuit
<p><b>0000 Stepless Manual Displacement Control</b>                      The pump is supplied without a regulator. The discharge flow can be steplessly adjusted by manually turning adjustment screws on the pump. This adjustment provision is a standard feature on all K3VG pumps providing a means to limit the maximum and minimum displacement.</p>	 <p>Range of Flow Control 50-100%</p>	
<p><b>10## Horsepower Control</b>  <b>1N## Horsepower and Negative Flow Control</b>                      In response to a rise in delivery pressure, the swash plate tilting angle is decreased, restricting the input torque. This regulator prevents excessive load against the prime mover. By adding a pilot signal to the Pi port the discharge flow can be infinitely adjusted within the range of the pump. An increase in pilot signal will result in a decrease in flow, hence the Negative control.</p>	 <p>Range of Flow Control 100-15%</p>	
<p><b>1P## Horsepower and Positive Flow Control</b>                      This regulator combines the Horsepower Control with Positive Flow Control. By adding a pilot signal to the Pi port the discharge flow can be infinitely adjusted within the range of the pump. An increase in pilot signal will result in an increase in flow, hence the Positive control.</p>	 <p>Range of Flow Control 2.5-100%</p>	
<p><b>1E## Horsepower and Electric Flow Control</b>                      This regulator combines the Horsepower Control with Electric Flow Control. A proportional reducing valve is added to the regulator so the discharge flow can be infinitely adjusted within the range of the pump. An increase in electric signal to the proportional reducing valve will result in an increase in flow. This regulator requires an amplifier (refer to page 9) to provide the electric signal.</p>	 <p>Range of Flow Control 2.5-100%</p>	
<p><b>50## Horsepower and Pressure Cutoff</b>  <b>5N## Horsepower, Pressure Cutoff and Negative Flow Control</b>                      This regulator combines the Horsepower Control with Pressure Cutoff Control. By adding a pilot signal to the Pi port the discharge flow can be infinitely adjusted within the range of the pump. An increase in pilot signal will result in a decrease in flow, hence the Negative control.</p>	 <p>Range of Flow Control 100-15%</p>	

## FUNCTIONAL DESCRIPTION OF REGULATORS (continued)

Regulator Code	Control Curves	Hydraulic Circuit
<p><b>5P## Horsepower, Pressure Cutoff and Positive Flow Control</b>                      This regulator combines the Horsepower Control with Pressure Cutoff Control. By adding a pilot signal to the Pi port the discharge flow can be infinitely adjusted within the range of the pump. An increase in pilot signal will result in an increase in flow, hence the Positive control.</p>	 <p>Range of Flow Control 2.5-100%</p>	 <p>D<sub>r</sub> B</p>
<p><b>5E## Horsepower, Pressure Cutoff and Electric Flow Control</b>                      This regulator combines the Horsepower Control with Pressure Cutoff and Electric Flow Control. A proportional reducing valve is added to the regulator so the discharge flow can be infinitely adjusted within the range of the pump. An increase in electric signal to the proportional reducing valve will result in an increase in flow. This regulator requires an amplifier (refer to page 9) to provide the electric signal.</p>	 <p>Range of Flow Control 2.5-100 %</p>	 <p>D<sub>r</sub> B<sub>1</sub> B<sub>2</sub></p>
<p><b>5L## Horsepower and Load Sense Control</b>                      This regulator combines Horsepower Control and Load Sense Control.</p>	 <p>Range of Flow Control 2.5-100%</p>	 <p>D<sub>r</sub> B</p>
<p><b>6000 Pressure Cutoff Control</b>                      This regulator maintains a constant pressure regardless of the discharge flow. It is imperative that a safety relief valve is installed in the circuit.                       By connecting the Pc port to a remote pressure control, variable pump pressure control can be achieved.                       A subplate can be added to the regulator that will accommodate a "DO3" proportional relief valve for variable Pressure Cutoff Control.</p>		 <p>D<sub>r</sub> B</p>
<p><b>6L00 Load Sense Control</b>                      This regulator controls the pump displacement to match the flow requirement as a function of load pressure. In addition, there is a Pressure Cutoff Function incorporated into the regulator.</p>	 <p>Range of Flow Control 2.5-100%</p>	 <p>D<sub>r</sub> B</p>

## FUNCTIONAL DESCRIPTION OF REGULATORS (continued)

Regulator Code	Control Curves	Hydraulic Circuit
<p><b>70## Horsepower and Pressure Cutoff</b>  <b>7N## Horsepower, Pressure Cutoff and Negative Flow Control (with Remote Pressure Cutoff Capability)</b></p> <p>This regulator combines the Horsepower Control with Pressure Cutoff Control. By adding a pilot signal to the Pi port the discharge flow can be infinitely adjusted within the range of the pump. An increase in pilot signal will result in a decrease in flow, hence the Negative control.</p> <p>By connecting the Pc port to a remote pressure control, variable pump pressure control can be achieved.</p> <p>A subplate can be added to the regulator that will accommodate a "DO3" proportional relief valve for variable Pressure Cutoff Control.</p>		
<p><b>7P## Horsepower, Pressure Cutoff and Positive Flow Control (with Remote Pressure Cutoff Capability)</b></p> <p>This regulator combines the Horsepower Control with Pressure Cutoff Control. By adding a pilot signal to the Pi port the discharge flow can be infinitely adjusted within the range of the pump. An increase in pilot signal will result in an increase in flow, hence the Positive control.</p> <p>By connecting the Pc port to a remote pressure control, variable pump pressure control can be achieved.</p> <p>A subplate can be added to the regulator that will accommodate a "DO3" proportional relief valve for variable Pressure Cutoff Control.</p>		
<p><b>7E## Horsepower, Pressure Cutoff and Electric Flow Control (with Remote Pressure Cutoff Capability)</b></p> <p>This regulator combines the Horsepower Control with Pressure Cutoff and Electric Flow Control. A proportional reducing valve is added to the regulator so the discharge flow can be infinitely adjusted within the range of the pump. An increase in electric signal to the proportional reducing valve will result in an increase in flow. This regulator requires an amplifier (refer to page 9) provide the electric signal.</p> <p>By connecting the Pc port to a remote pressure control, variable pump pressure control can be achieved.</p> <p>A subplate can be added to the regulator that will accommodate a "DO3" proportional relief valve for variable Pressure Cutoff Control.</p>	