



The Speed-Valve SVA-050

The Speed-Valve SVA-050 is a regenerative valve, which will increase the movement of a cylinder rod moving out. This function is done by diverting the oil from the rod side of the cylinder to the cylinder side. By doing this the oil flow used to move the cylinder rod out comes from the rod side as well as from the pump and will increase the speed of moving the rod up to 100%.

The SVA-050 has a built-in valve, which ensures the rod side of the valve is vented to tank, when the rod meets resistance (e.g. clamps on a work piece) or the rod is arriving at the end position. That means high flow is present when the cylinder rods move out freely, and the full force is available when needed to clamp, stamp or move a work piece.

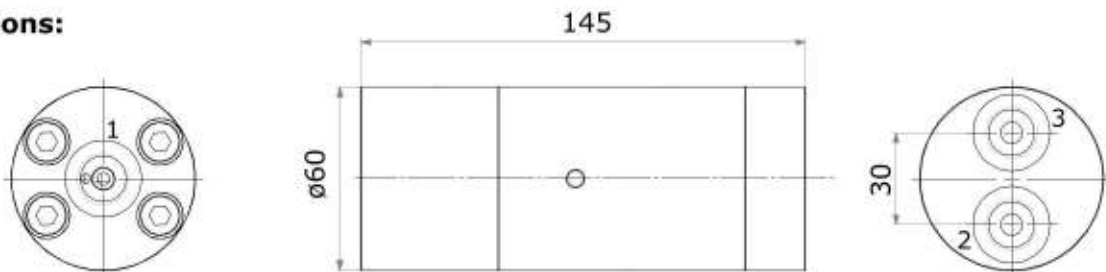
The SVA-050 works automatically, no setting of pressures is required.



Technical data:

| | |
|------------------|---------------------------------|
| Materials: | Cast Iron, steel |
| Surface coating: | Chromit |
| Fluids: | Hydraulic oils and water glycol |
| Pressure rating: | Max. 350 bar |
| Flow rating: | Max. 50 LPM (pump setting) |
| Filtration: | 10 micron nominal |

Dimensions:

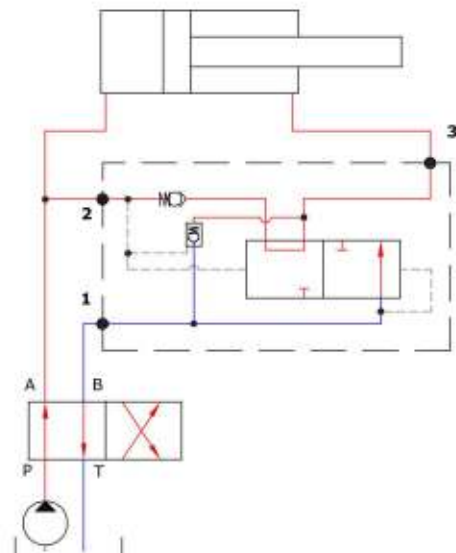


All connection ports: G3/8"

Connecting the SVA-050:

With reference to the figure:

Connect Port 1 to the B-port of the directional valve, connect Port 2 to the A-port of the directional valve, which is also connected to the cylinder side of the cylinder and connect port 3 to the rod side of the cylinder



The cycle:

Fig.1:

When applying pressure in port A, and connecting port B to tank, the spool valve will be in the left position. This means port 3 will be directly connected to port 2, and the oil from the rod side of the cylinder is diverted over the check valve to port 2. this increases the flow of oil moving the cylinder forward.

Fig.2:

When the rod of the cylinder meets resistance, a pilot signal will open the p.o. check valve to open. This will connect the rod side of the cylinder to tank, and close the check valve. The full cylinder force is now acting upon the work piece.

Fig.3:

When changing position of the directional valve, so B will be connected to pump and A to tank, the spool valve will change position connecting the rod side of the cylinder to the pump through port 1 and port 3. At the same time the cylinder side is connected to tank, and the cylinder rod will retract freely.

Fig.1 Regeneration mode
- High forward speed

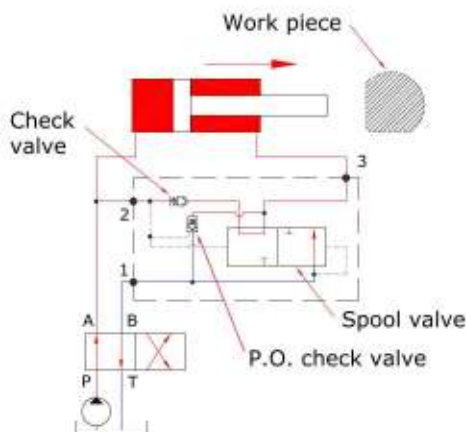


Fig.2 Automatic change to normal mode
- Full cylinder power

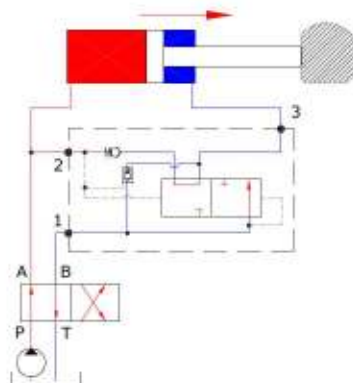
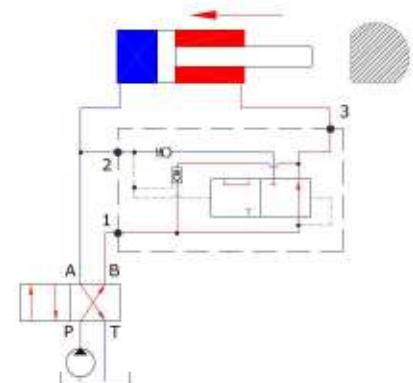
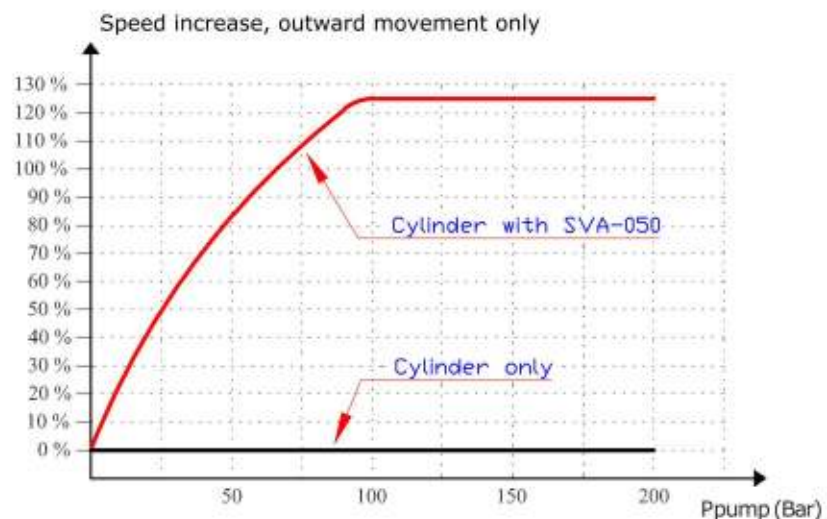


Fig.3 Normal return mode



Performance example:

Cylinder $\varnothing 80 / \varnothing 50$ mm
Stroke = 800 mm
 $Q_{\text{pump}} = 20$ LPM





The Speed-Valve SVA-200

The Speed-Valve SVA-200 is a regenerative valve, which will increase the movement of a cylinder rod moving out. This function is done by diverting the oil from the rod side of the cylinder to the cylinder side. By doing this the oil flow used to move the cylinder rod out comes from the rod side as well as from the pump and will increase the speed of moving the rod up to 100%.

The SVA-200 has a built-in valve, which ensures the rod side of the valve is vented to tank, when the rod meets resistance (e.g. clamps on a work piece) or the rod is arriving at the end position. That means high flow is present when the cylinder rods move out freely, and the full force is available when needed to clamp, stamp or move a work piece.

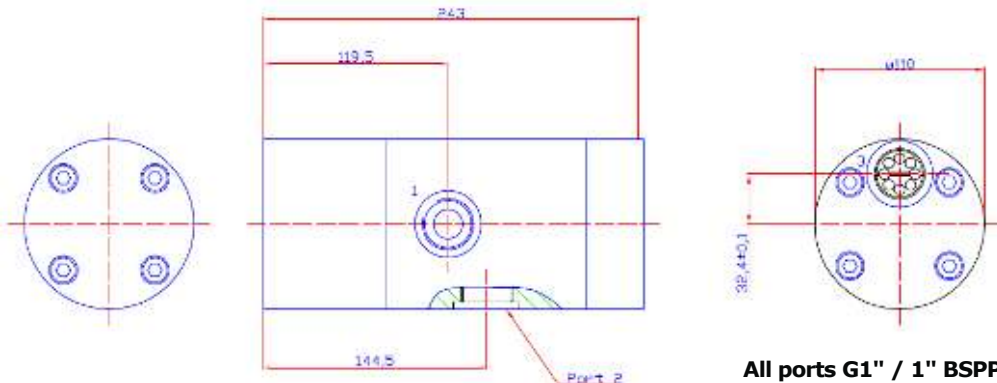
The SVA-200 works automatically, no setting of pressures is required.



Technical data:

| | |
|------------------|---------------------------------|
| Materials: | Cast Iron, steel |
| Surface coating: | Chromit |
| Fluids: | Hydraulic oils and water glycol |
| Pressure rating: | Max. 350 bar |
| Flow rating: | Max. 200 LPM (pump setting) |
| Filtration: | 10 micron nominal |

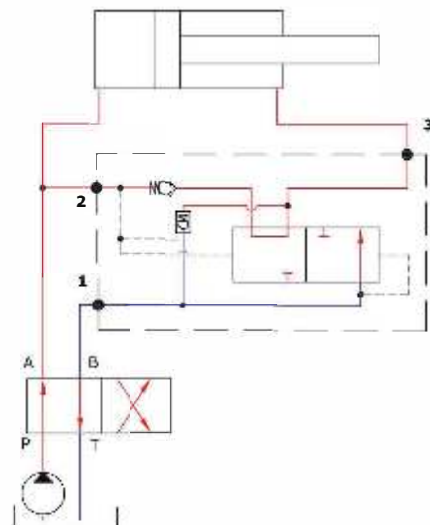
Dimensions:



Connecting the SVA-200:

With reference to the figure:

Connect Port 1 to the B-port of the directional valve, connect Port 2 to the A-port of the directional valve, which is also connected to the cylinder side of the cylinder and connect port 3 to the rod side of the cylinder



The cycle:

Fig.1:

When applying pressure in port A, and connecting port B to tank, the spool valve will be in the left position. This means port 3 will be directly connected to port 2, and the oil from the rod side of the cylinder is diverted over the check valve to port 2. This increases the flow of oil moving the cylinder forward.

Fig.2:

When the rod of the cylinder meets resistance, a pilot signal will open the p.o. check valve to open. This will connect the rod side of the cylinder to tank, and close the check valve. The full cylinder force is now acting upon the work piece.

Fig.3:

When changing position of the directional valve, so B will be connected to pump and A to tank, the spool valve will change position connecting the rod side of the cylinder to the pump through port 1 and port 3. At the same time the cylinder side is connected to tank, and the cylinder rod will retract freely.

Fig.1 Regeneration mode
- High forward speed

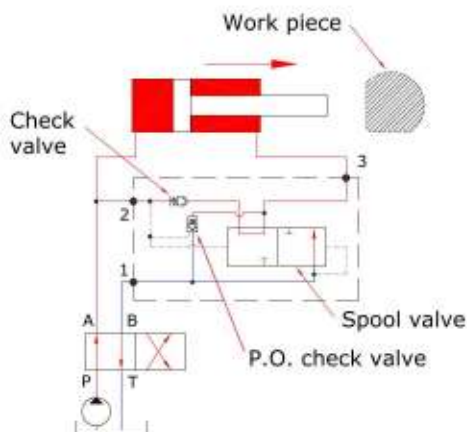


Fig.2 Automatic change to normal mode
- Full cylinder power

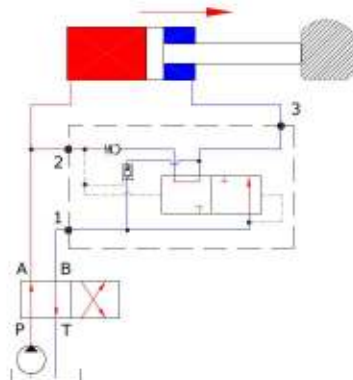
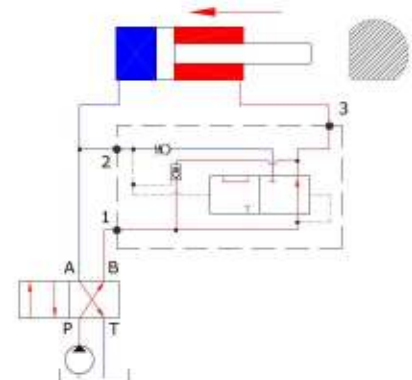


Fig.3 Normal return mode



Performance example:

Cylinder $\varnothing 80 / \varnothing 50$ mm
Stroke = 800 mm
 $Q_{\text{pump}} = 20$ LPM

