

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

The Speed-Valves SV-040 & SVA-050



Compact Design

High Pressure Rating

Automatic Operation

Applications:

- Machine Tools
- Waste Compactors
- Presses
- Workholding Circuits
- Mobile Equipment
- Power Packs

Function

The Speed-Valve series is a range of regenerative valves increasing the speed of the forward movement of a double acting cylinder. This is achieved by diverting the oil from the B-side of the cylinder to the A-side. The total flow used to move the cylinder forward is then $Q_A = Q_{\text{pump}} + Q_B$. The Speed-Valves will not affect the return speed of the cylinder. As

an option a unique built in control valve automatically changes from speed to force when the cylinder meets resistance in the forward direction. The Speed-Valves are designed as in-line valves, easily installed into any hydraulic circuit. No additional controls are needed, as the Speed-Valves are controlled by the control valve in the system.

The cycle:

When the pump in Fig.1 is connected to the A-side of the cylinder, a pilot signal ensures the Speed-Valve is moved in the position, where the B-side of the cylinder is connected to the A-side through ports 2

and 3. When retracting the cylinder in Fig.2 a pilot signal ensures the Speed-Valve is moved in the position, where the B-side of the cylinder is connected to the pump through ports 1 and 2.

Fig. 1

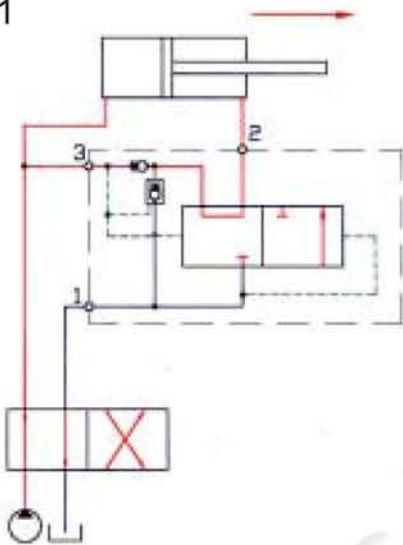
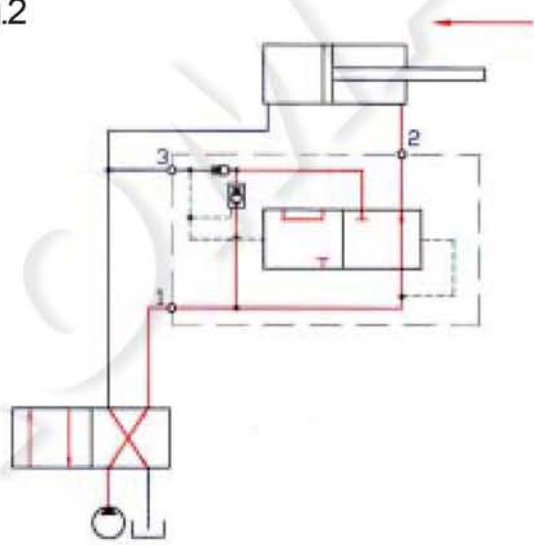
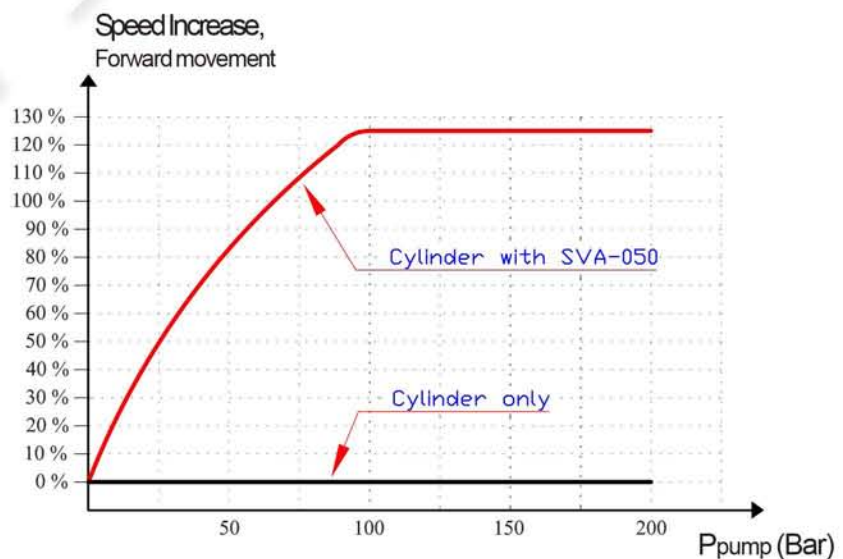


Fig.2

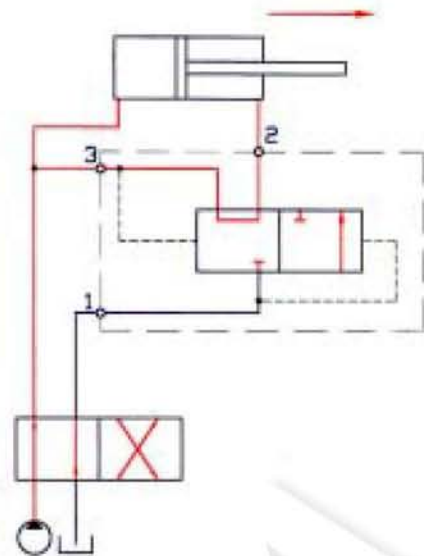


Example:

Cylinder $\varnothing 80 / \varnothing 50$ mm , stroke = 800 mm
 $Q_{\text{pump}} = 20$ LPM
 Speed-Valve Type SV-040



The Speed-Valve SV-040

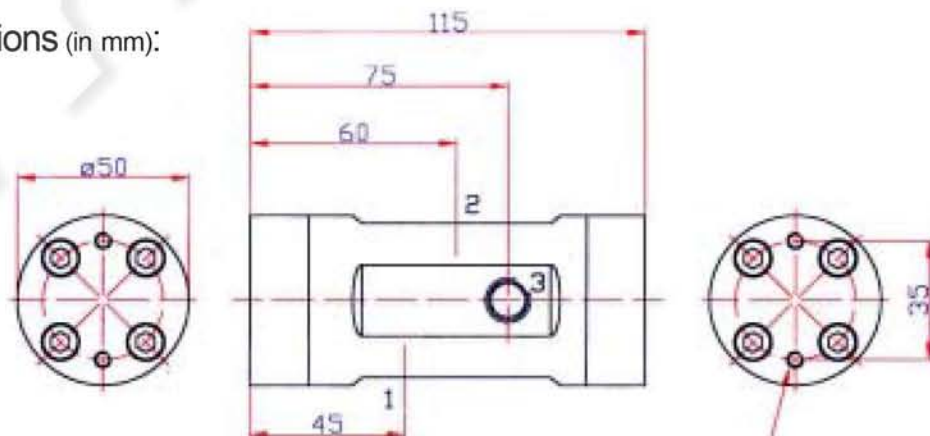


eration. Designed as an in-line valve, the SV-040 can be placed right at the cylinder ensuring the lowest possible pressure drop.

Technical Data:

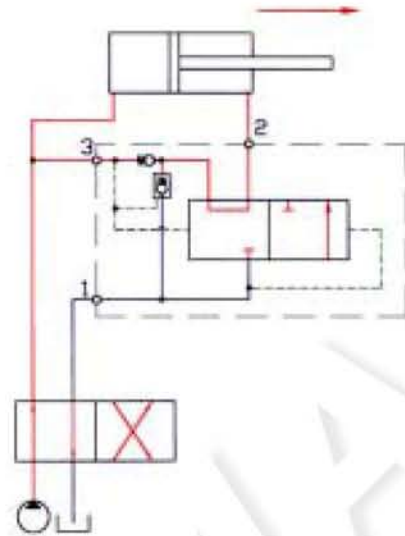
Materials:	The SV-040 is made from cast iron and steel, and the valve has a zinc-chromate surface coating. The SV-040 can be made in stainless steel on request.
Fluids:	Suitable for most recognized hydraulic oils and water glycol.
Pressure Rating:	350 Bar
Flow Rating:	40 LPM (pump setting)
Filtration:	20 micron nominal
Connections:	3/8" BSP
Cylinder Force:	Constant regeneration means the cylinder force in the forward direction (push) is the differential force between the cylinder side and the rod side as the same pressure is present on both sides of the cylinder. The SV-040 has no influence on the performance of the cylinder when retracting.

Dimensions (in mm):



Fixing holes M5x8, 4 off

The Speed-Valve SVA-050



The Speed-Valve SVA-050 has a unique built in control valve, which automatically connects the rod side of the cylinder to tank when the cylinder meets resistance in the forward direction. This means the SVA-050 combines high flow and full force.

Technical Data:

Materials:	The SV-050 is made from cast iron and steel, and the valve has a zinc-chromate surface coating. The SV-050 can be made in stainless steel on request.
Fluids:	Suitable for most recognized hydraulic oils and water glycol.
Pressure Rating:	350 Bar
Flow Rating:	50 LPM (pump setting)
Filtration:	20 micron nominal
Connections:	3/8" BSP
Cylinder Force:	Due to the integrated control valve the SVA-050 automatically connects the rod side of the cylinder to tank when there is a resistance or the cylinder is fully extracted. That means the full force is always available when needed. The SVA-050 has no influence on the performance of the cylinder when retracting.

Dimensions (in mm):

