

# Load Holding / Load Lowering Valves Type VAL

## Holding Loads safely and controlled lowering

Valves of type VAL prevent moving ahead of cylinders or motors due to external loads. They block the connection to which the load pressure acts without leakage. Only when a movement is to be initiated by the inlet pressure to the opposite side of the cylinder or the motor, the valve is opened by this pressure acting as a pilot control signal, and the load is lowered in a controlled manner. In addition to the load holding and lowering function, the valves include a low-loss check valve function and a pressure-limiting function.

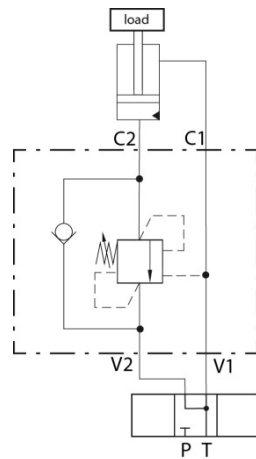
They are usually mounted directly on the consumer or as close as possible to it.



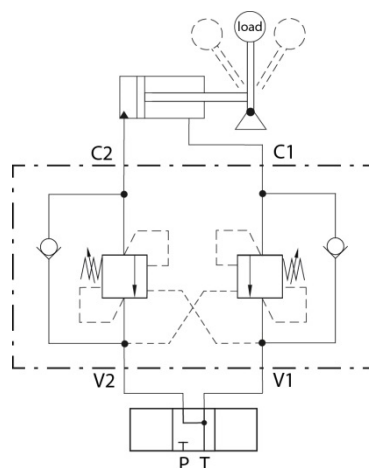
### Main features

- Leakage free holding function
- Controlled lowering
- Minimum flow loss

Single valve in a block: Load holding for one direction



Double valve in a block: Load holding for both directions



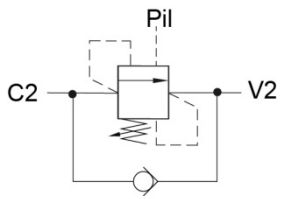
### Typical applications

- Loading cranes
- Lifting platforms
- Construction machinery
- Forrestry machinery
- Agricultural machinery
- ....

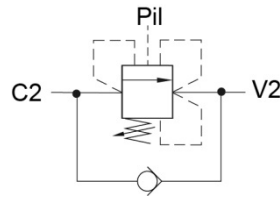
### Samples

Operating pressure	350 bar
VAL-SNS79	40 l/min
VAL-SNS31	90 l/min
VAL-SNS34	150 l/min

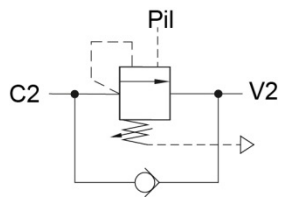
### Functional Variants



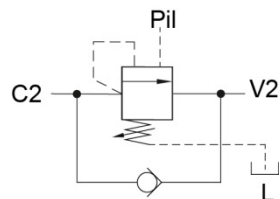
Type VAL-SNS  
Standard:  
The spring chamber is relieved to port V2. The opening level of the pressure valve is increased by return pressure



Type VAL-SCS  
Compensated:  
The opening level of the pressure valve remains independent of the return pressure, but the opening level of the lowering brake valve increases accordingly

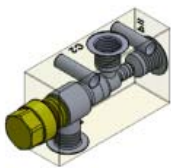


Type VAL-SVS  
Ambient pressure compensated:  
The opening level of the pressure valve and of the lowering brake valve remain independent of the return pressure

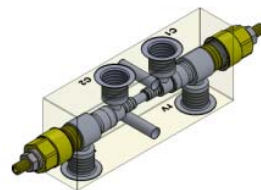


Type VAL-SDS  
Completely compensated:  
By connecting the spring chamber with the leakage port, the opening level of the pressure valve and of the lowering brake valve remain independent of the return pressure

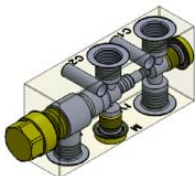
### Block Variants



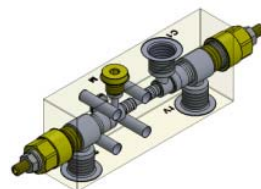
Complete  
Pipe installation,  
externally piloted



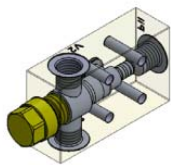
Complete  
Pipe installation



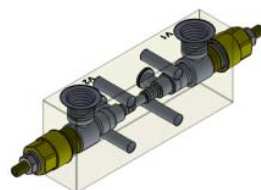
Complete  
Pipe installation,  
externally piloted



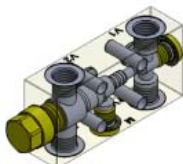
One flange connection  
for cylinder applications



One flange connection  
for cylinder applications



Two flange connections  
for cylinder applications



Two flange connections  
for cylinder applications

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