

## Pressure limiting valves type CMV and CSV

Pressure valves influence the pressure in hydraulic systems. Pressure-limiting valves (safety or overpressure valve) safeguard the system against excessive pressure or limit the operation pressure. Sequence valves generate a constant pressure difference between the inlet and outlet flow, where the flow in the opposite direction (return flow) is free via a bypass check valve.

One advantage of the valves described here is the easily produced mounting hole (see dimensions). Type CMV is also available as a CE-marked pressure-limiting valve with unit approval, e.g. as a safety valve for accumulators in accordance with Pressure Equipment Directive 97/23 EC. Types CMVZ and CSVZ are not influenced by the pressure conditions downstream and are therefore suitable for use in loss-free sequence control systems.

### Features and benefits:

- Operating pressures up to 500 bar
- Various adjustment options
- Easily produced mounting hole

### Intended applications:

- General hydraulic systems
- Test benches
- Hydraulic tools



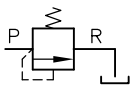
<b>Nomenclature:</b>	Pressure limiting valve, sequence valves (directly controlled)
<b>Design:</b>	Screw-in valve
<b>Adjustment:</b>	Tool adjustable Manually adjustable
<b>p<sub>max</sub>:</b>	500 bar
<b>Q<sub>max</sub>:</b>	60 lpm

### Design and order coding example

CMV 3	F	R	- 200	- 1/4
				Indiv. connection block for pipe connection
				Pressure setting [bar]
				Adjustability (while pressurized) Tool or manually adjustable
				Pressure range Pressure ranges B, C, E and F
<b>Basic type, size</b>	Type CMV (pressure limiting valve), size 1 to 3 Type CSV (pressure difference valve), size 2 to 3			
	<b>Additional versions:</b>			
	<ul style="list-style-type: none"> <li>■ Sequence valves CMVZ or CSVZ</li> <li>■ Version with unit approval type CMVX</li> <li>■ Undamped version (CMV)</li> </ul>			

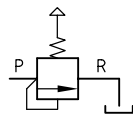
## Function

### CMV

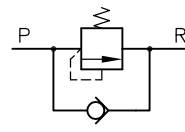


Pressure limiting valve (port R pressure resistant)

### CMVZ

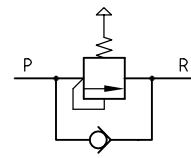


### CSV



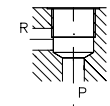
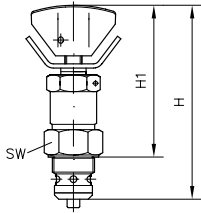
Sequence valves with by-pass check valve

### CSVZ

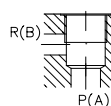
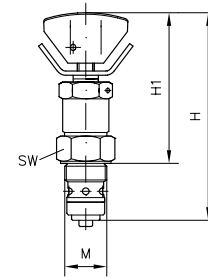


## General parameters and dimensions

### CMV/CMVZ



### CSV/CSVZ



	Size	Q <sub>max</sub> [lpm]	Pressure range p <sub>max</sub> [bar]	M	SW = a/f	Dimensions [mm]		m [g]
						H <sub>max</sub>	H1 <sub>max</sub>	
CMV, CMVZ	1	20	F: 80 E: 160 C: 315 B: 500	M 16 x 1.5	SW 22	78	57	90
	2	40		M 20 x 1.5	SW 24	94	72	160
	3	60		M 24 x 1.5	SW 30	114	83	275
CSV, CSVZ	2	40		M 20 x 1.5	SW 24	104	73	150
	3	60		M 24 x 1.5	SW 30	122	82	300

### Associated technical data sheets:

- Pressure-limiting valves type CMV, CSV: [D 7710 MV](#)
- Pressure-limiting valves with unit approval type CMVZ: [D 7710 TÜV](#)

- Piloted pressure valves type DV: [D 4350](#)
- Piloted pressure valves type AS: [D 6170](#)

### Similar products:

- Pressure-limiting valves type MV, SV etc.: [D 7000/1](#), [D 7000 M](#)
- Miniature pressure-limiting valves type MVG etc.: [D 3726](#)