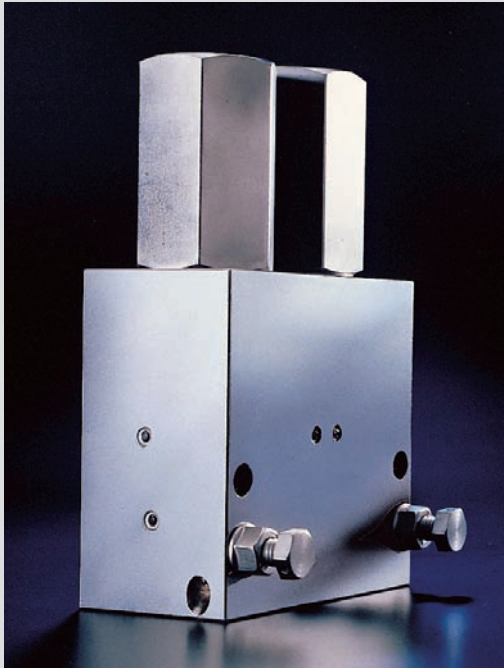


# Over-center valves type LHK, LHT and LHDV



<b>Basic type</b>	LHK, LHT, LHDV
<b>Nomenclature</b>	Over-center valve (drop-rate braking valve, for single-sided or alternating load direction) as individual or double valve
<b>Oper. pressure</b>	420 bar
<b>Flow</b>	250 lpm
<b>Version</b>	Individual valve for pipe connection Individual manifold mounting valve Cartridge valve Version for banjo bolt fixture

Load-holding valves (over-center valves) are pressure valves, which operate at the return side of double acting consumers. Their main purpose is to build-up the necessary counter pressure (load holding pressure) towards reverse acting (drawing) loads thus preventing an uncontrolled speed of the cylinder. The differing damping

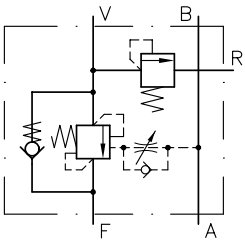
abilities necessary to suppress pressure pulsation evoked by swinging distinguish the load-holding valves type LHK, LHT and LHDV. They are used within applications, where loads have to be sensitively lowered or held safely over a prolonged period e.g. cranes and other lifting- and slewing mechanisms.

## Features and benefits

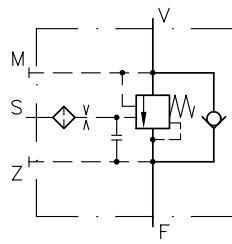
- Favorable performance/price ratio
- Maximum operation pressure 420 bar
- Maximum flow 250 lpm
- Compact design (low spatial requirements)
- Good dampening characteristic
- Optimal adaptation to the operation conditions (pressure and flow)
- Optional shock valves for the consumer
- Versions for consumers with one-sided load direction (pipe connection or manifold mounted valve) and consumers with alternating load direction (twin valve for pipe connection)
- Special versions on request

## Symbols (examples)

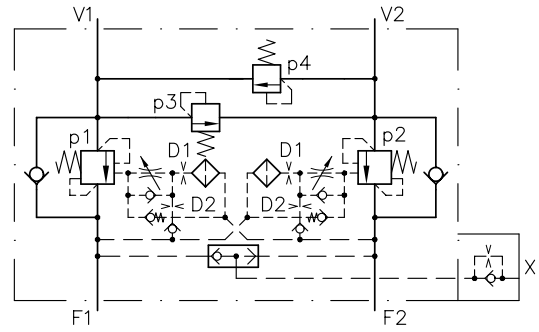
Type LHK



Type LHT



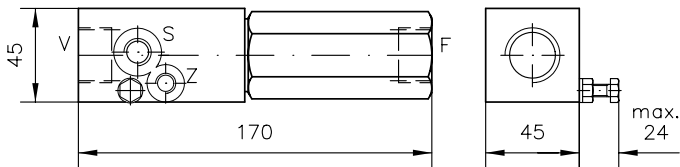
Type LHDV



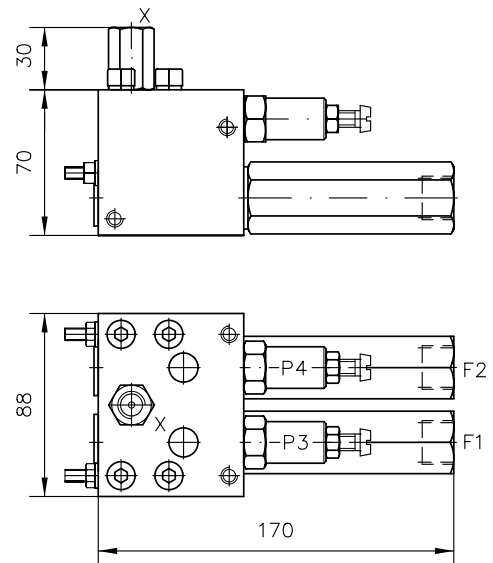
## Technical data (basic valve)

Basic type	LHK 2	LHK 3	LHK 4	LHT 2	LHT 3	LHT 5	LHDV 33
Oper. pressure (bar)	400	360	350	400	400	400	420
Flow (lpm)	20	60	100	28	100	250	80

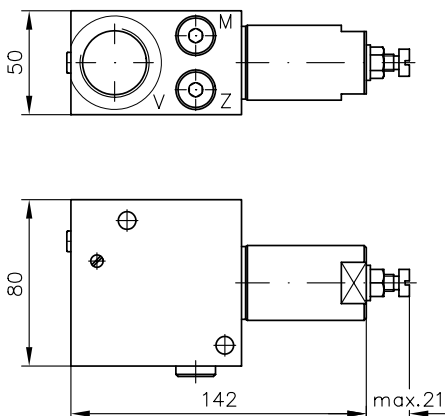
Example: Individual valve  
type LHK 44 G-11



Example: Double valve with shock valve  
type LHDV 33 G-25



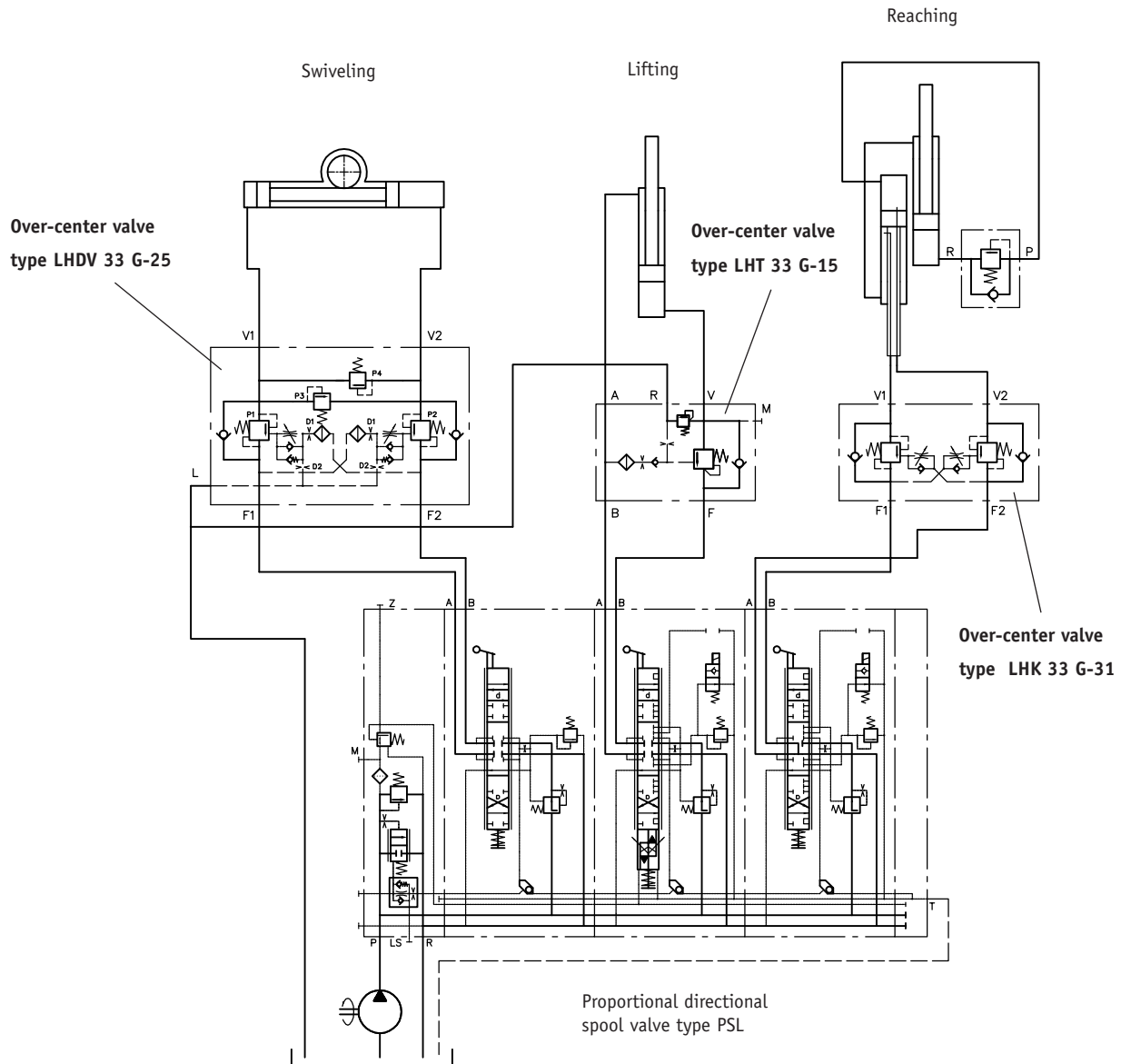
Example: Individual valve  
type LHT 50



All dimensions in mm, subject to change without notice !

## Example circuit

Example: Crane control



## Additional information related to this topic

• Product overview	K 177
• Over-center valves type LHK	D 7100
• Over-center valves type LHDV	D 7770
• Over-center valves type LHT	D 7918
• Proportional directional spool valve banks size 2 type PSL and PSV	D 7700-2
• Proportional directional spool valve banks size 3 type PSL and PSV	D 7700-3
• Proportional directional spool valve banks size 5 type PSL and PSV	D 7700-5
• Proportional directional spool valve banks via sub-plates type PSLF and PSVF	D 7700 F
• InLine axial piston variable displacement pump type V30D	D 7960
• InLine axial piston variable displacement pump type V30E	D 7960 E
• InLine axial piston variable displacement pump type V60N	D 7960 N
• Fixed displacement axial piston pump type K60N	D 7960 K
• Axial piston motors type M60N	D 7960 M



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