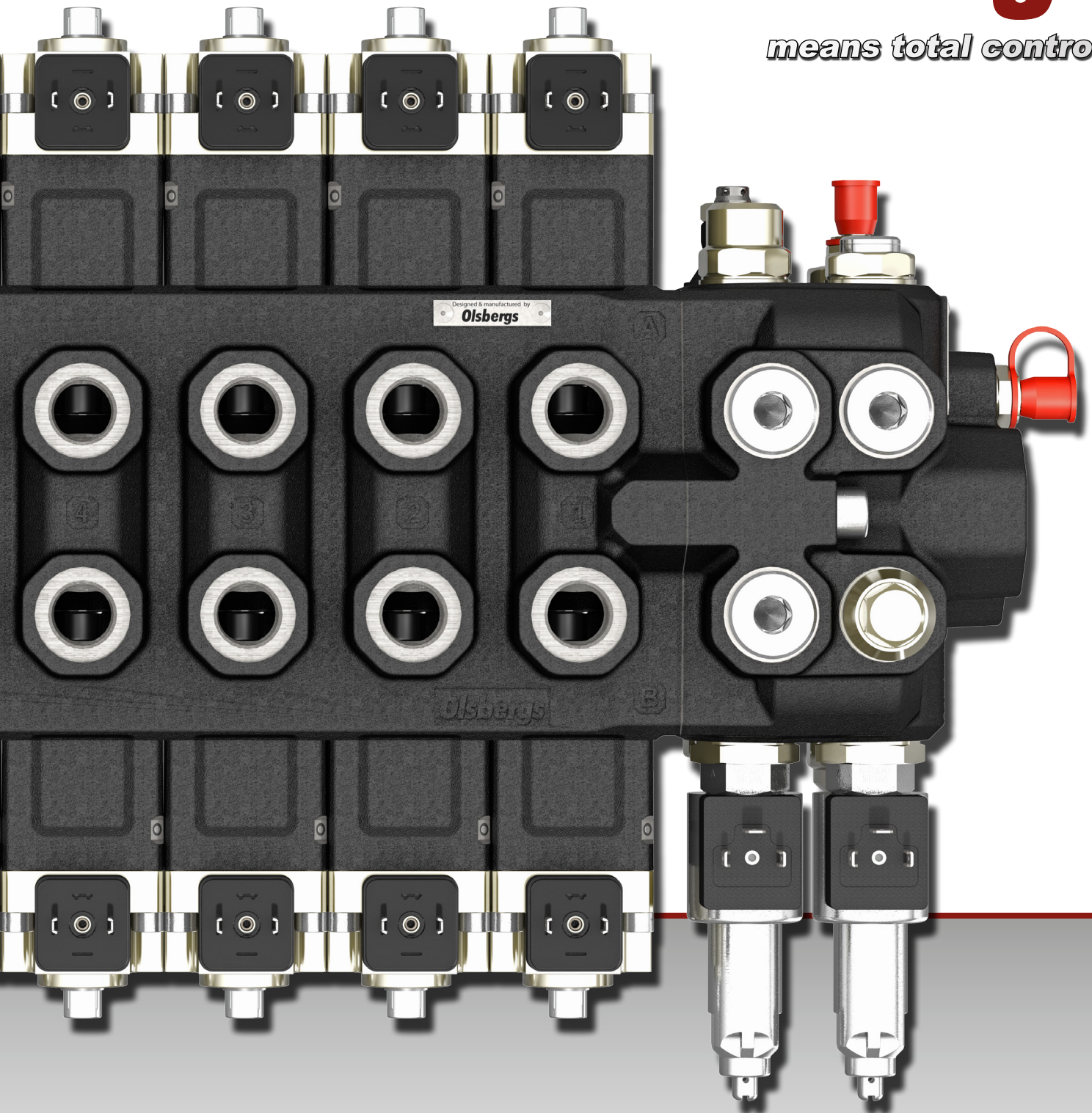


Olsbergs

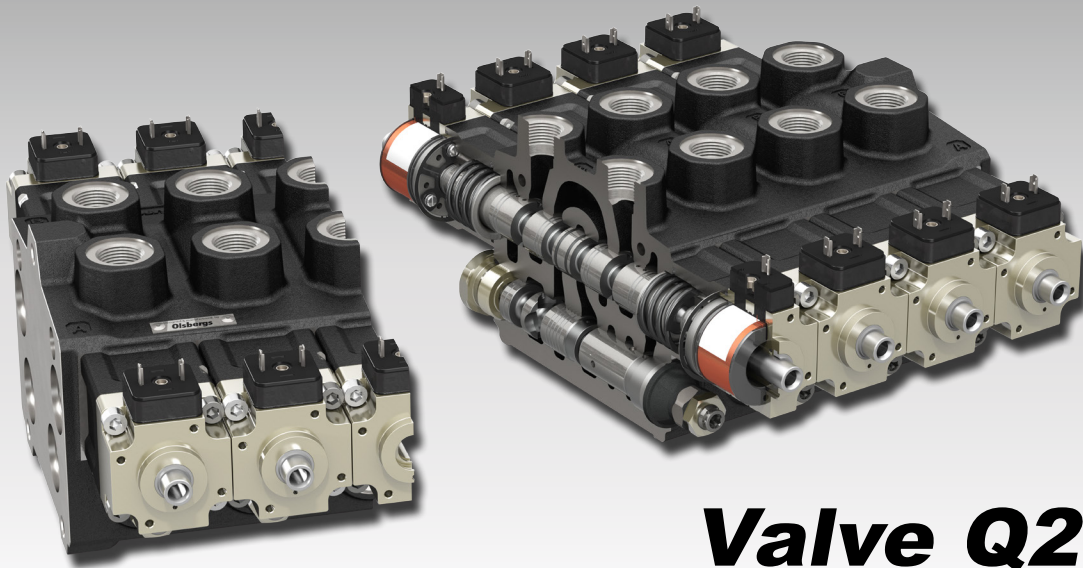
means total control



Q-Series

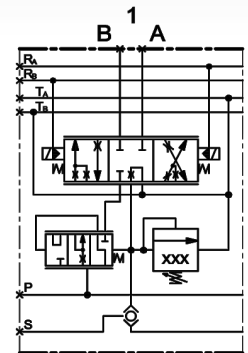
"A new generation of Olsbergs valves with even better control and regulation properties"

Q series for precision control of



Valve Q200

Olsberg presents the latest generation of load sensing and pressure compensating proportional valves, Q200 and Q300, in monoblock design. The hydraulic system is designed in modules for high capacity and flexible system configuration. Equipped with an electro-hydraulic servo, positioner P8, the valves can be remote controlled with great precision. Both Q200 and Q300 are high performance valves and can handle pump pressure of 45 MPa, (450 bar), and total feed flows of up to 300 l/min or 150 l/min per section.



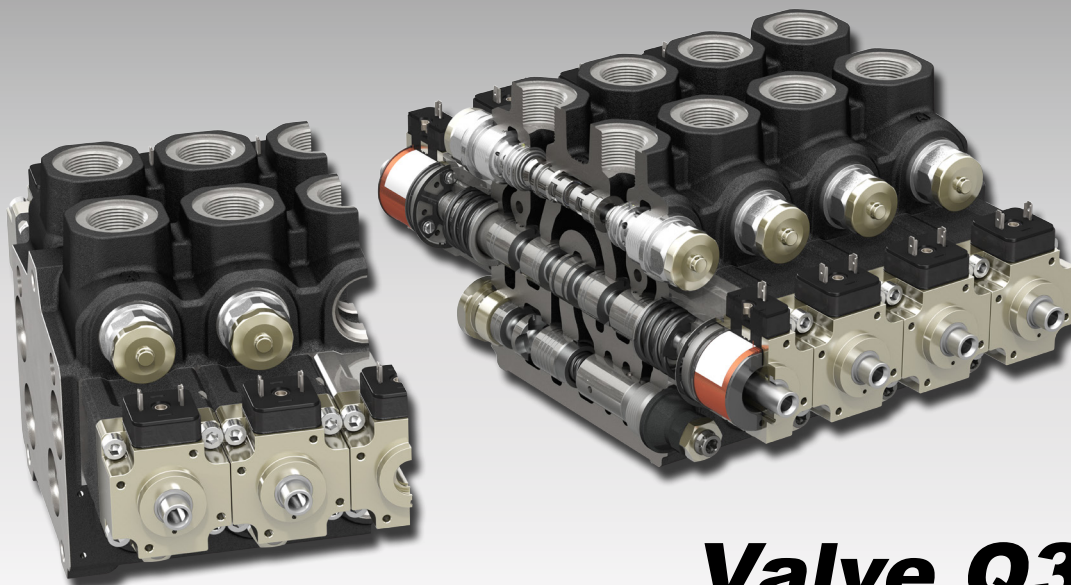
Modular design

Intelligent inlet sections for compact systems



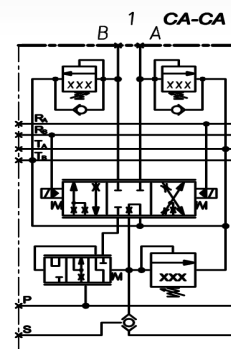
The inlet sections have a modular design and are available in three versions – J, VF and VFU. All three versions fit valve Q200 and valve Q300. All have connection ports for pump, tank, signal and servo pressure as well as ports for measuring pump pressure, tank pressure and servo pressure.

demanding applications



Valve Q300

Q200 is available in versions with 2 to 8 sections and Q300 is available with 2 to 6 sections. Q200 and Q300 are built in two and three levels, respectively. Levels one and two are the same for both valves. Level one houses a pressure compensator and shuttle system, level two houses the valve spools and level three houses shock relief valves with anticavitation function. Q200 has G $\frac{1}{2}$ " connections and Q300 has G $\frac{3}{4}$ " connections to the valve ports.



Flexibility

Outlet sections with integrated functions



The outlet sections have a modular design and are available in three versions – RF, S and P. All three versions fit valve Q200 and valve Q300. The RF outlet section is the most advanced module, with an integrated pressure reducer and filter unit.

Valves with a little something extra

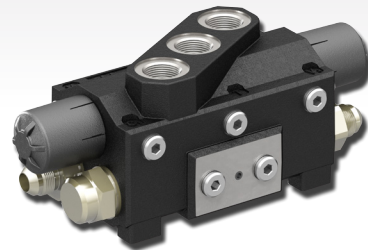
Load holding valve

- Pressure compensated, pressure controlled non-return valve with built-in “shock relief valves”
- Stable and vibration-free lifting and lowering movement
- Low drive pressure on the piston rod side



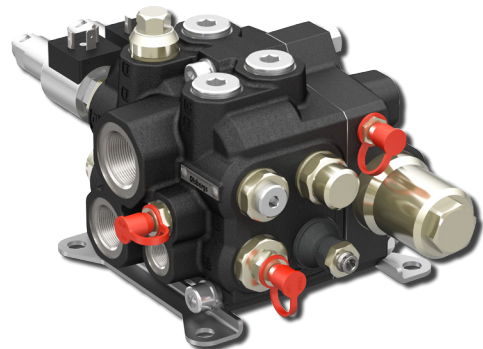
Slewing valve

- Double load holding valve for slewing and hydraulic motor functions in a load sensing system
- Integrated shock relief and anticavitation function
- Stable and safe slewing movement



Supply unit

- Smart valve solution for rotating machines in which the main valve is situated above the centre of rotation.
- Consists of one inlet section and one outlet section
- Minimises the number of lines that pass through the centre of rotation

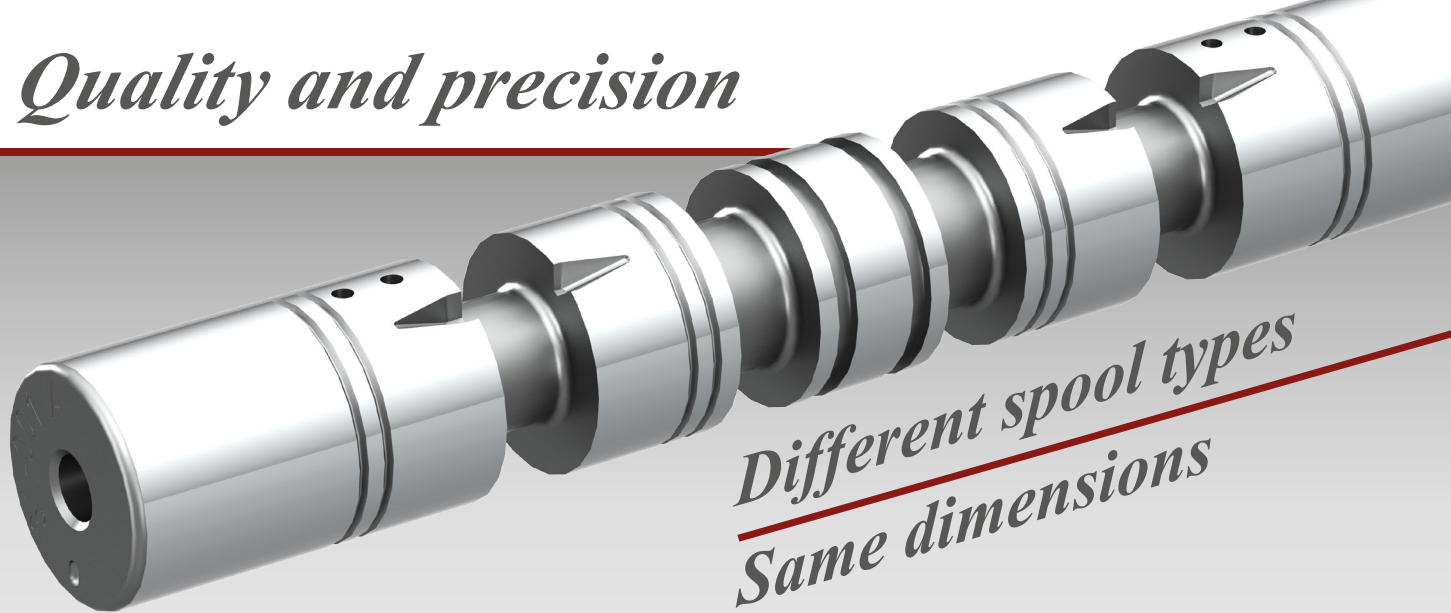


Valve Pv98

- A small monoblock valve for constant pressure – 2 or 4 sections
- Supply flow up to 100 l/min and 50 l/min per section
- Maximum pressure from pump is 45 MPa



Quality and precision

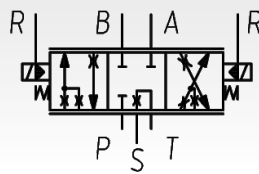


Different spool types
Same dimensions

Motor spools



Double-acting spools

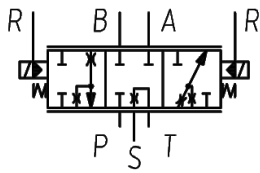


Double-acting spools

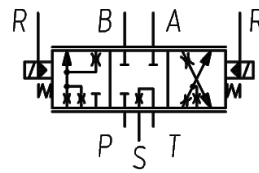
with draining in mid-position



Single-acting spools

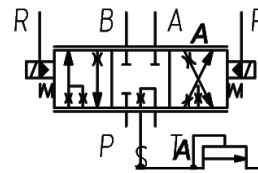


Regenerative spools

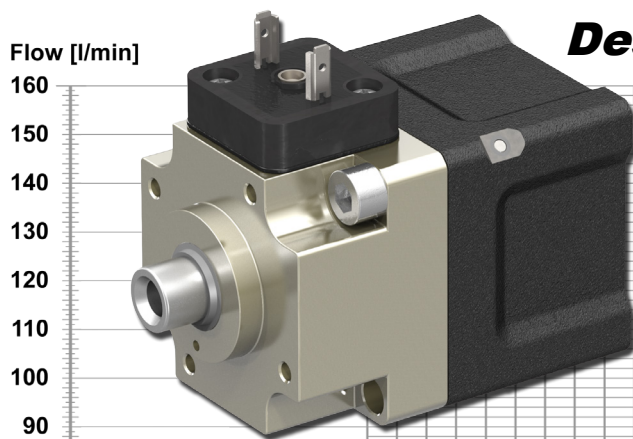


Double-acting spools

with integral signal pressure limiting



Designed for remote control

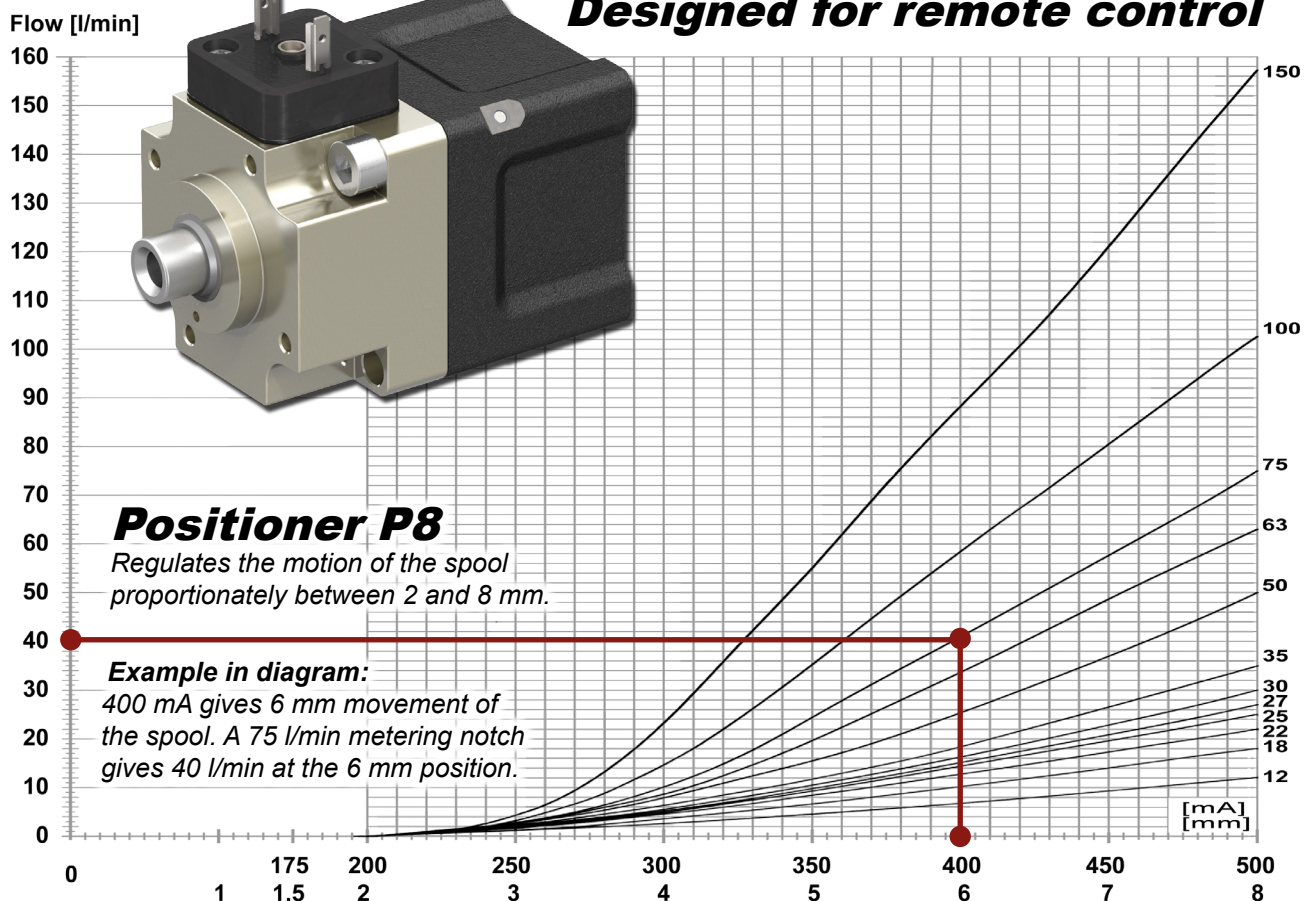


Positioner P8

Regulates the motion of the spool proportionately between 2 and 8 mm.

Example in diagram:

400 mA gives 6 mm movement of the spool. A 75 l/min metering notch gives 40 l/min at the 6 mm position.



Olsbergs control system for loader cranes

Fingertip control in all modes

The superior control and coordination characteristics of the Olsbergs control system give the loader crane a broad range of applications. Up to eight functions can be controlled simultaneously yet independently of one another. For example, the crane can smoothly and easily retrieve or deliver goods through narrow passageways such

as balconies, windows and doors.

The good running characteristics come from Olsbergs' advanced hydraulic valve technology in combination with high-quality electronics which have been continually developed and refined over the past thirty years. Measurement accuracy in all hydraulic system components enables precise steering, regardless of whether control is manual or remote.



Smart system solution – for high productivity

Olsbergs' remote controlled loader crane control system consists of the Q200 valve equipped with VFU inlet section and RF outlet section. The inlet section is also designed to be able to supply pres-

sure-compensated flow to the support leg valves, Pv98. The RF outlet section has a built-in filter and pressure reducer. It supplies steering servos, positioners P8, with reduced pressure.

Positioner P8

Positioner P8 is a unique steering servo for mechanical repositioning of the valve spool. Thanks to its advanced design, you can control the valve spool position precisely, regardless of flow forces and loads.

Remote control via radio or cable

The Olsbergs loader crane control system can be remote controlled via radio or cable. Controllers are available in different models to suit different needs and requirements.



Quick but gentle support leg application

Control of the support legs is handled by valve Pv98 – a tough little monoblock constant pressure valve. The valve enables gentle and stable application of the support legs and greatly extends the service life of the support legs.

Load holding valve for stable and vibration-free lifting and lowering movement

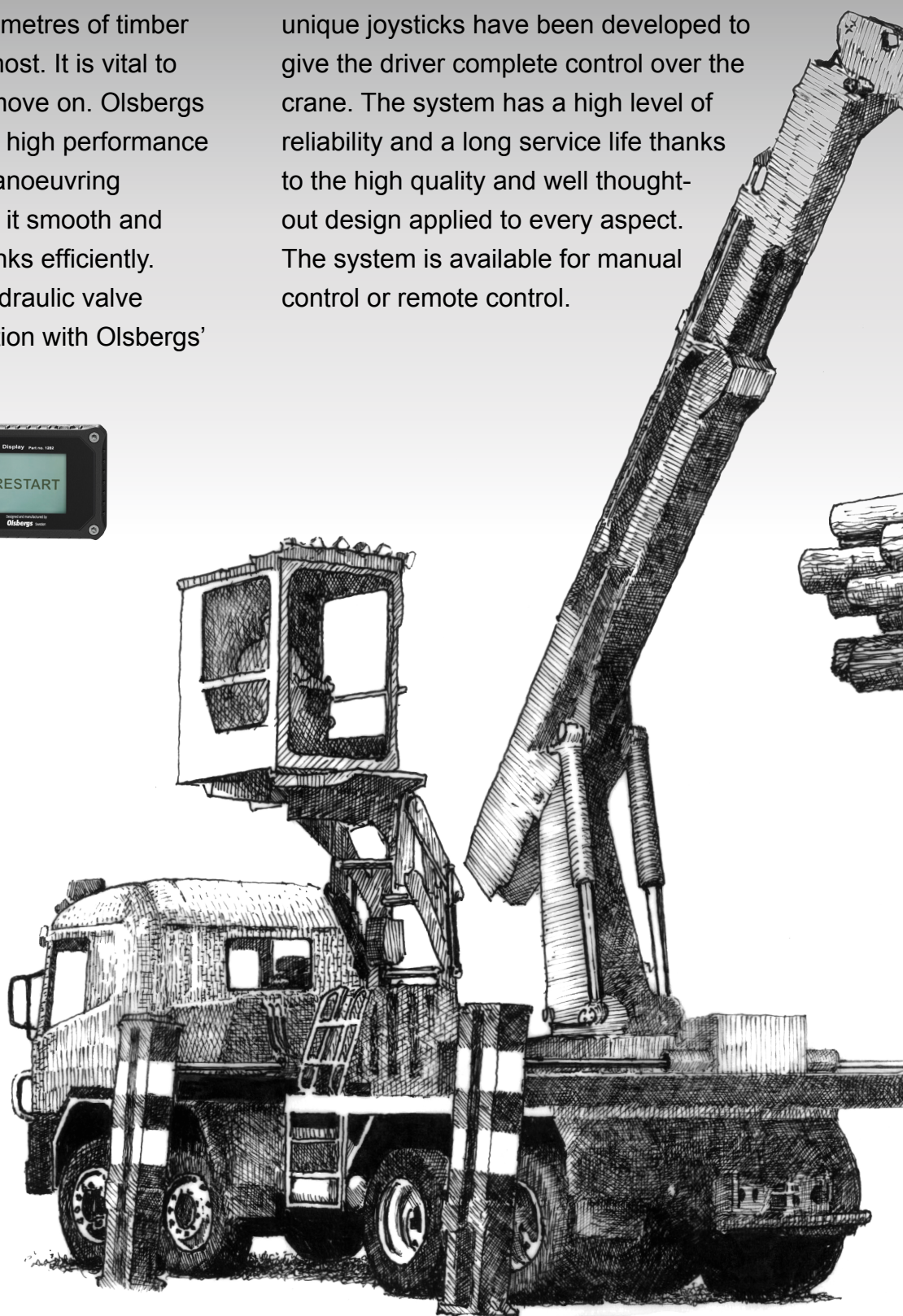
To comply with crane standard requirements, a loader crane must be equipped with load holding valves for controlled and safe handling of goods.

Olsbergs control system for forestry cranes

The sensitivity of the levers

In the forest, it is cubic metres of timber per hour that matters most. It is vital to load quickly and then move on. Olsbergs control systems deliver high performance and extremely good manoeuvring characteristics, making it smooth and easy to handle tree trunks efficiently. Olsbergs' advanced hydraulic valve technology in combination with Olsbergs'

unique joysticks have been developed to give the driver complete control over the crane. The system has a high level of reliability and a long service life thanks to the high quality and well thought-out design applied to every aspect. The system is available for manual control or remote control.



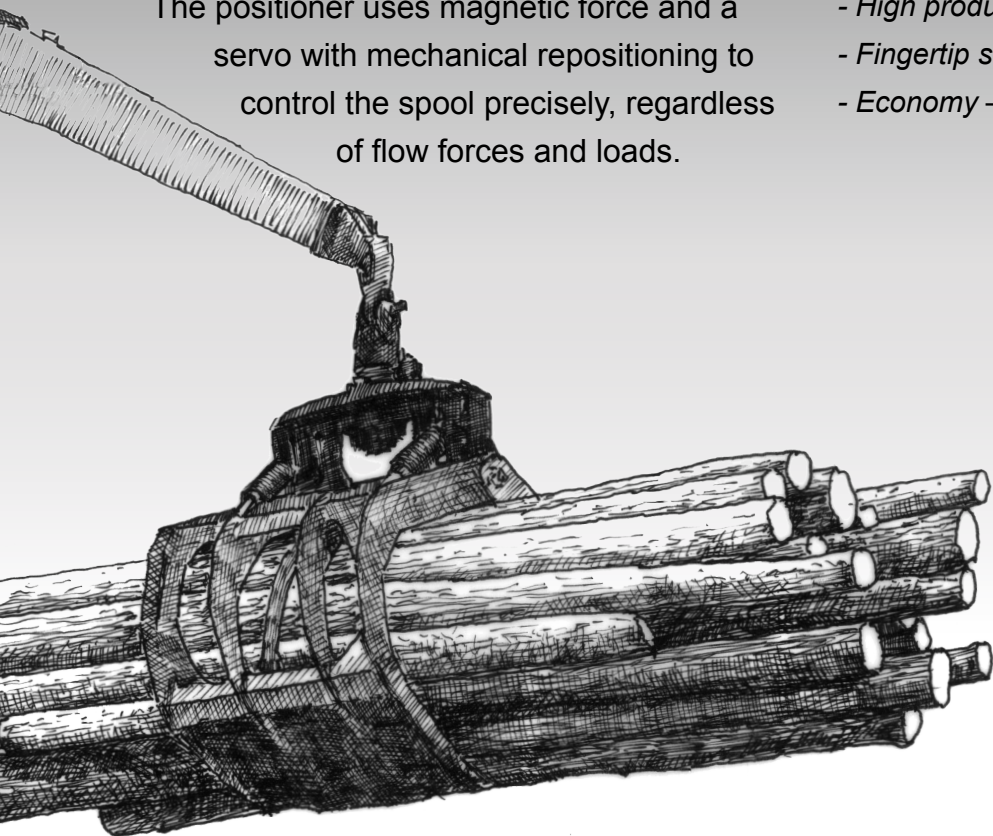
Valve Q300

The main valve of the forestry crane system is valve Q300, which is a load sensing, pressure compensated, closed centre valve in monoblock design with three levels. The bottom level is the pressure

compensators and shuttle system, the intermediate level is for valve spools and the upper lever is for shock relief valves with anticavitation function.

Positioner P8

The positioner uses magnetic force and a servo with mechanical repositioning to control the spool precisely, regardless of flow forces and loads.



Olsbergs control system

- *High productivity – quickly and controlled*
- *Fingertip sensitivity – precision and flexibility*
- *Economy – low operating costs*



More powerful support leg valve for handling several functions

The more powerful Q200 valve is used to control the support legs in the forestry crane system as different pressures are required for different functions. In addition



to the support legs, the valve can also handle cab raising and lowering, bank shifting, carriage extension and crane parking.

Olsbergs control system - other applications

Multi-function machines where performance and precision are important

The superior control and coordination characteristics of the Olsbergs control system really shine in mobile machine applications in which several functions are run simultaneously.

The precision and performance of the control system gives the machine operator full control, enabling him to perform large, heavy or precise movements with small hand and finger movements. Within the capacity range of the system, the only limits as to what movements can be performed are those set by the imagination.

Quality down to the smallest detail - Profitable

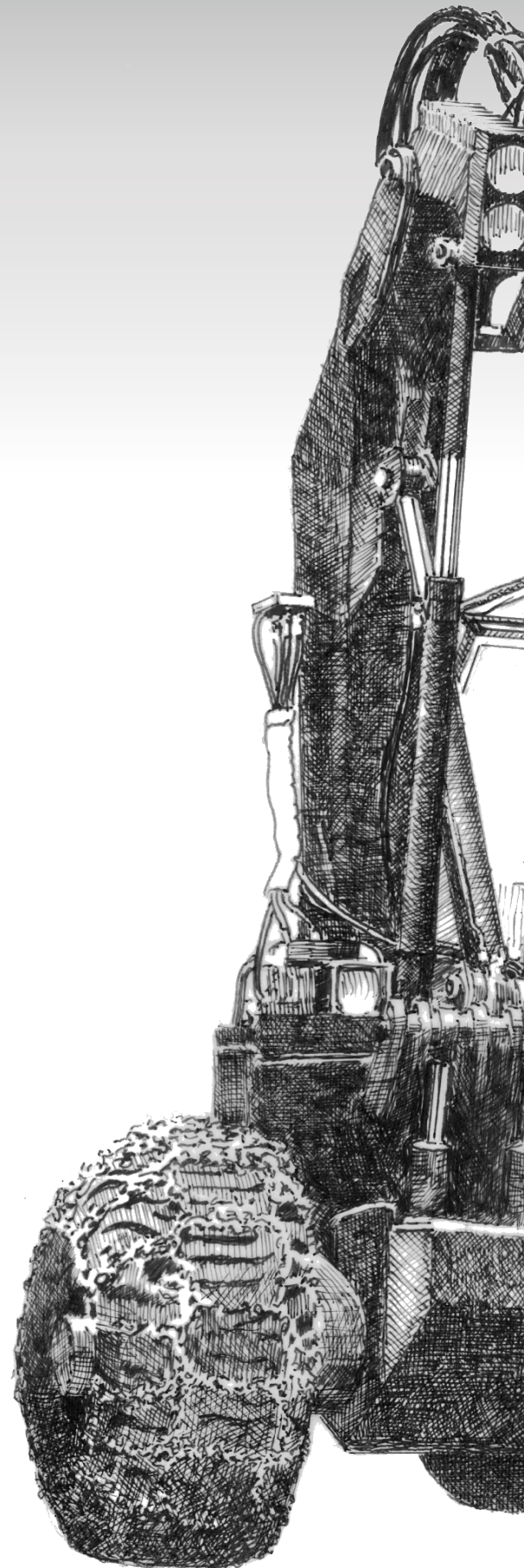
Olsbergs' hallmark is quality down to the smallest detail. All manufacturing of Olsbergs control systems is done at the group's factories in Sweden, giving the company full control of the entire chain from quality castings goods to a fully calibrated system. Good quality paves the way to products with a high level of availability and long service life, making cost per utilised hour low and making good profitability possible for the customers.

Sensitivity of the levers

The special sensitivity of the levers of Olsbergs control systems is hard to describe. You simply have to experience it in action. Please contact us if you want to test out the system in our simulator or at one of our customers.

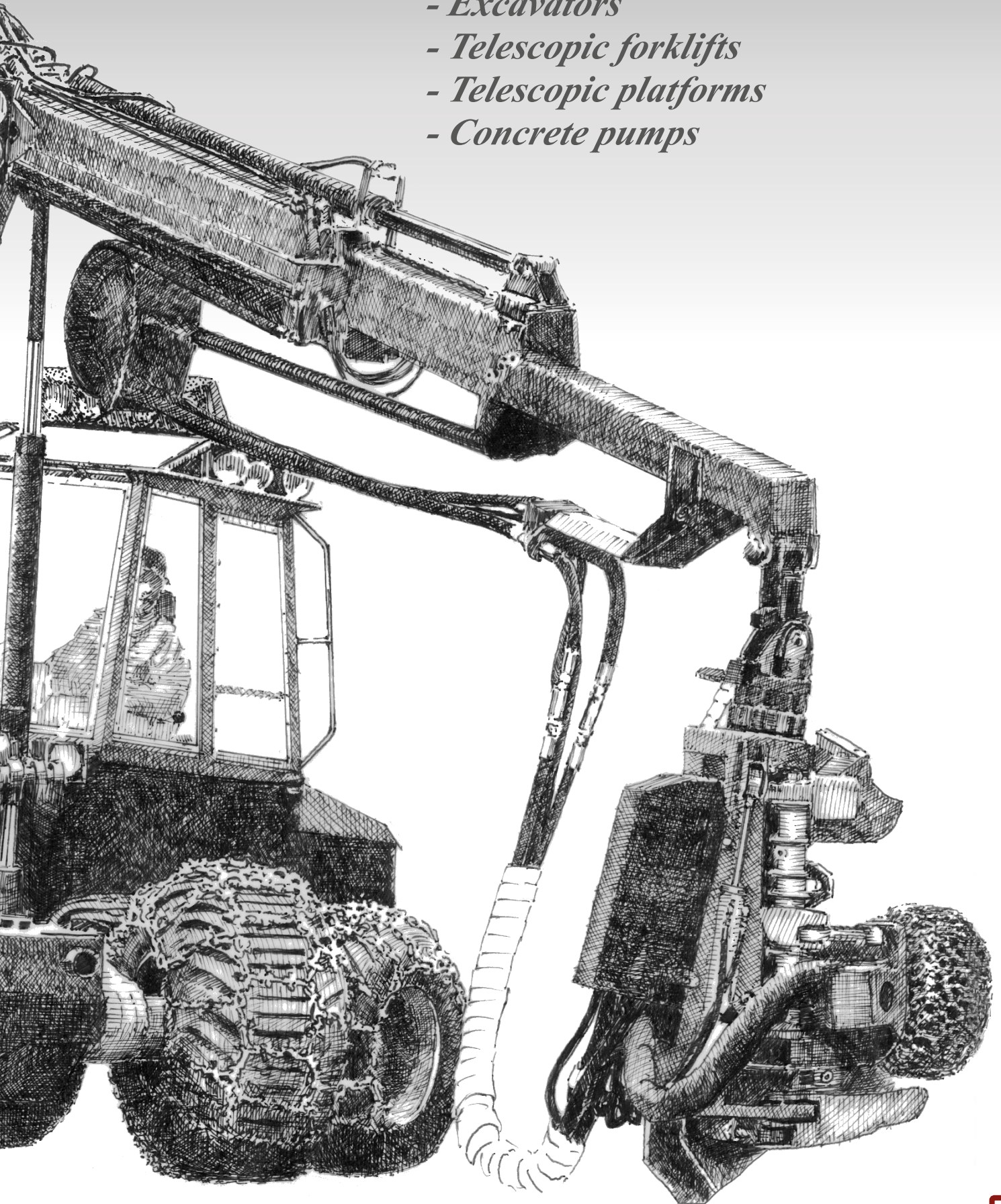
Olsbergs control system

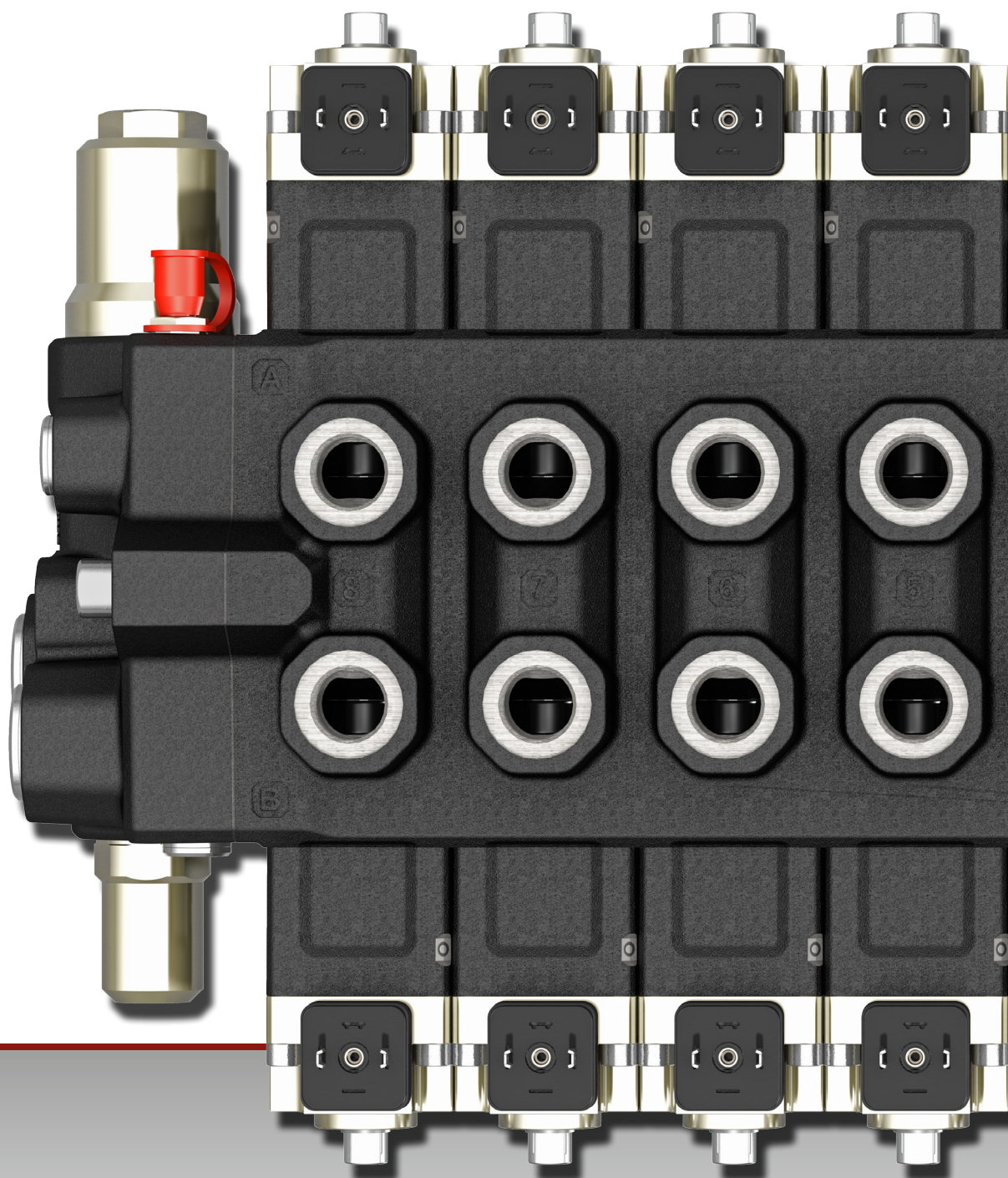
- High productivity - fast and controlled**
- Fingertip control - precision and flexibility**
- Economy - Low operating costs**



Different types of applications:

- Forestry machines*
- Excavators*
- Telescopic forklifts*
- Telescopic platforms*
- Concrete pumps*





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