

No. 6906

Pump unit

with pressure-control device (DSG),
single- and double-acting,
max. operating pressure 400 bar.



Order no.	Article no.	Clamping circuits	Q [l/min]	Valve type	Matching control unit	Electric control	Pressure switch	Weight [Kg]
324590	6906-61620	1	2,5	4/3	-	-	-	53
326033	6906-61621	1	2,5	4/3	6906B-2-1	●	-	61
326041	6906-61621-BZH	1	2,5	4/3	6906BZH-2	●	2	61
324616	6906-62620	2	2,5	4/3	-	-	-	56
326058	6906-62621	2	2,5	4/3	6906B-3-2	●	-	64

Design:

Compact, plug-in pump unit, ready for electric and hydraulic operation. Complete with: Pressure-control device, solenoid valve, pressure gauge, floating switch with temperature monitoring, oil filling, electrical control with main switch, indicator lamps and flange sockets. Electrical connection, complete with CEKON connector, pressure filter with filter mesh of 25µm. Oil supply via threaded port.

Application:

These pump units are mainly used as drive and control elements for single- and double-acting clamping devices.

Operation type:

Control panel for one and two clamping circuits. Two-hand control panel for only one clamping circuit.

Features:

The radial piston pump is driven via an alternating current standard motor to energy efficiency class IE3. The motor is protected against overload by a motor protection switch and a thermocouple. Pressure setting and pressure monitoring are made via a pressure control device. The pressure control device combines the pressure limiting valve (PLV) and the pressure switch (PS) in a single device. The pressure is continuously adjustable over the entire pressure range by means of an adjustment sleeve. The point for restarting is about 10-15% below the switch-off point.

- High safety standard through the use of 4/3-directional seat valves!
- No unwanted travel movements. In the event of a loss of power or contact problems, the valve returns to the hermetically sealed centre position.
- Easy actuation by external machine controllers (e.g. PLC).

The pump unit works intermittently. In the event of a loss of pressure, the pump is subsequently automatically switched by the pressure control device. In case of low oil level or an increase in oil temperature, the built-in floating switch with temperature monitoring switches the pump off and the fault lamp on the electrical controller comes on.

Note:

Ensure that the ventilation is working properly when connecting the elements. In the event of a loss of pressure, subsequent pumping must not exceed a maximum of 2 times per minute. The pump unit must not be allowed to run continuously.

Options:

Clamping circuits: For up to 5 clamping circuits, there is an electrical controller. For more than 5 clamping circuits, there is no electrical controller.

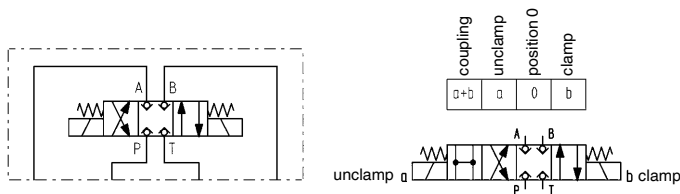
Valve combination: Pressure reduction and clamping pressure monitoring in certain clamping circuits. Pressure reduction for all subsequent clamping circuits. Pressure filter with filter mesh 10µm or 40 µm. Throttle valves for specified clamping circuits.

On request:

Directional valves with other function diagrams on request.
Three to five clamping circuits on request.

Hydraulic diagrams:

Energizing both valve magnets creates a switching position that links all 4 connections to each other. A depressurised state is created that allows easy coupling.



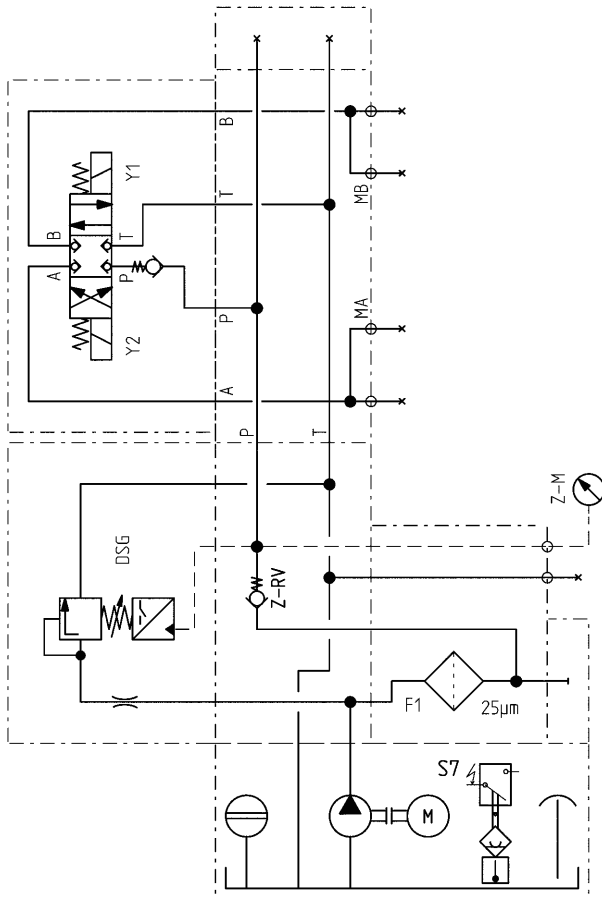
4/3-directional seat valve for single and double-acting consumers



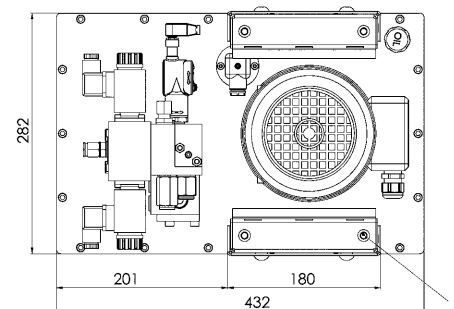
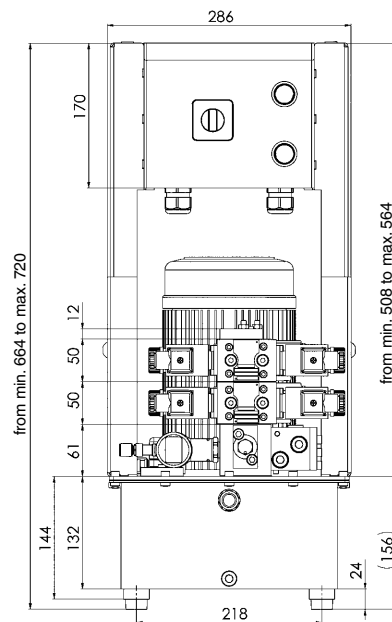
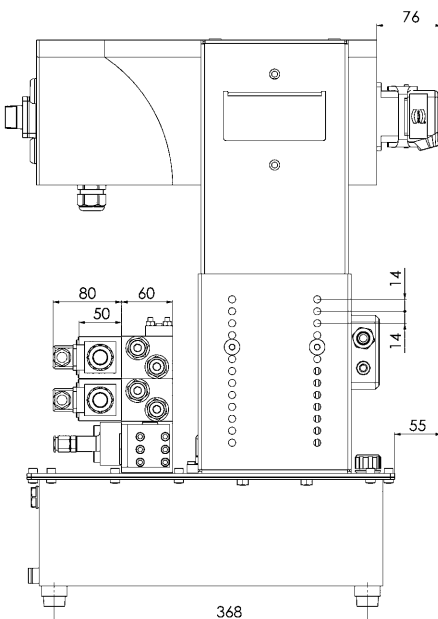
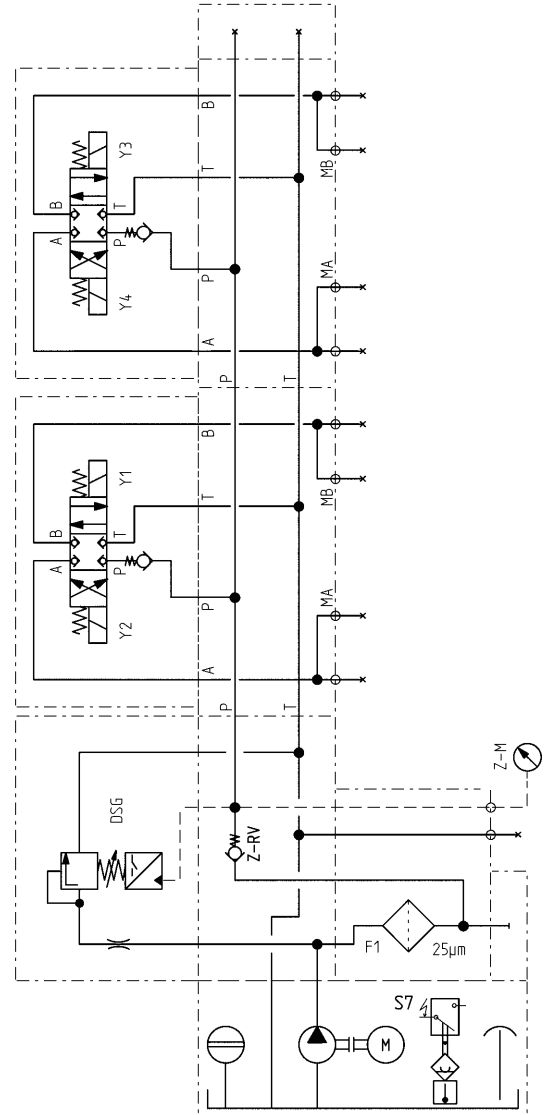
CAD

Hydraulic diagrams with DSG:

1 clamping circuit, double-acting



2 clamping circuits, double-acting



M8 thread for lifting devices

Subject to technical alterations.

Pump unit No. 6906, 1 and 2 clamping circuits

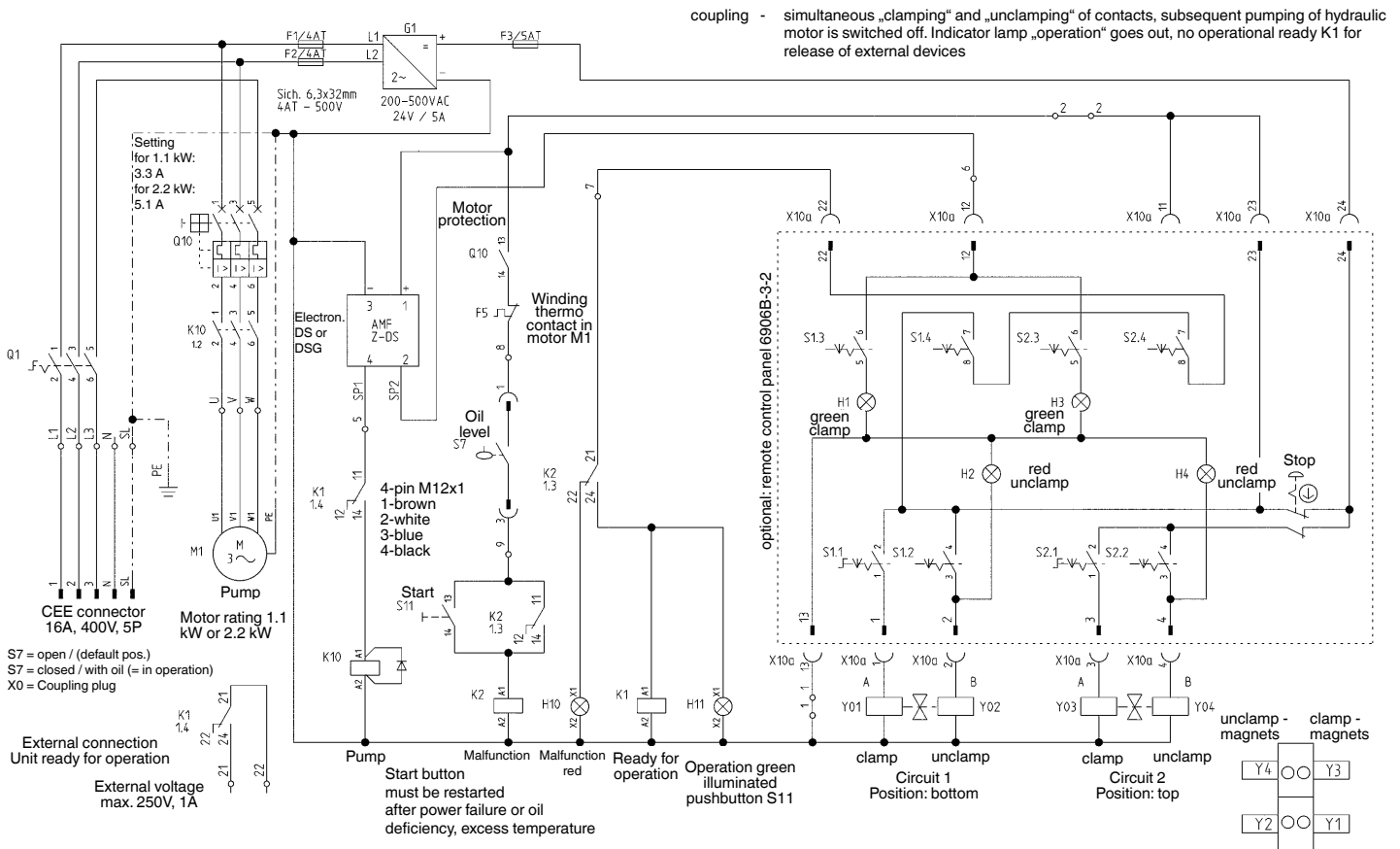
Hydraulic specifications:

Max. operating pressure	400 bar
Oil capacity, reservoir	10 litres
Oil capacity, usable	4 litres
Oil-flow rate	2,5 l/min.
Valve types	4/3 seat valve
No. of hydraulic circuits	1 or 2
Hydraulic connection	pipe fitting G1/4
Noise level	max. 70 dB(A)
Ambient temp. range	-10° C to + 35° C
Position of use	upright
Pump design	radial-piston pump with 3 pistons
Load cycle	max. 500/h
Fluid	hydraulic oils HLP and HLPD according to DIN 51524 part 2
Oil recommendation	HLP 22 and HLPD 22 or HLP 32 and HLPD 32
Viscosity	ISO VG 22 and 32 DIN 51519

Electrical specifications:

Nominal voltage	400 V/50 Hz three-phase
Control voltage	24 V DC
Valve voltage	24 V DC
Motor speed	2900 1/min.
Direction of rotation	any
Motor rating	1,1 kW
Motor type	three-phase standard motor
Nominal current	3 A
Fuse, supply line	16 A slow-blow
Fuse, control circuit	2 A primary, 8 A secondary
Electrical connection	Ölflex 100; 5×1,5 mm ² 3 m with CEE connector 16 A 6 h
Protection class	IP 54
Duty cycle	max. 50 % intermittent operation

Wiring circuit of pump unit with 2 clamping circuits, remote control



To increase safe handling of the clamped parts, the unit ready for operation and a clamping pressure query should be integrated with the processing machine.