

#### No. 6906

## Pump unit

with pressure relief valve and electronic pressure switch, 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]
322214	6906-61610	1	2,5	4/3	-	-	-	53
325951	6906-61611	1	2,5	4/3	6906B-2-1	•	-	61
325969	6906-61611-BZH	1	2,5	4/3	6906BZH-2	•	2	61
322230	6906-62610	2	2,5	4/3	-	-	-	56
325977	6906-62611	2	2,5	4/3	6906B-3-2	•	-	64

#### Design:

Compact, plug-in pump unit, ready for electric and hydraulic operation. Complete with: pressure limiting valve and pressure switch, solenoid valve, pressure gauge, float switch with temperature monitoring, oil fill, electrical control with main switch, indicator lamps and flange sockets. Electrical connection, complete with CEKON connector, pressure filter with filter mesh of  $25\mu m$ . 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 with the energy efficiency class IE3. The motor is protected against overload by a motor protection switch and a thermoelement. Pressure setting and pressure monitoring are accomplished via a pressure limiting valve (DBV) and an electronic pressure switch (EDS). The value set at the pressure limiting valve is stored with the Mode button on the pressure switch. This simultaneously sets the preprogrammed switch-off and switch-back point.

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

The pump unit works in intermittent mode. In the event of a loss of pressure, the pump is subsequently automatically switched by the pressure switch. In the event of a lack of oil 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 lights up.

#### 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.

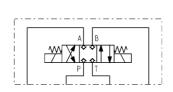
Valve combination: Pressure reduction and clamping pressure monitoring in certain clamping circuits. Pressure reduction for all subsequent clamping circuits. Pressure filter with filter mesh  $10\mu m$  or  $40\mu m$ . Throttle valves for specified clamping circuits.

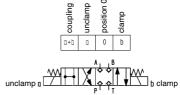
### On request:

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.





 $4/3\mbox{-}\mbox{directional}$  seat valve for single and double-acting consumers

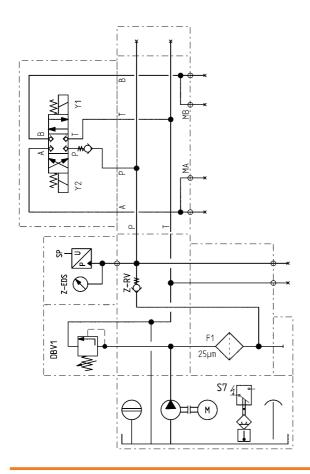


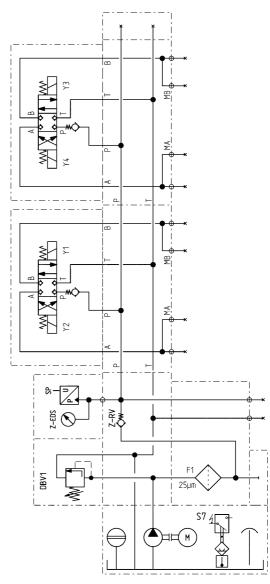


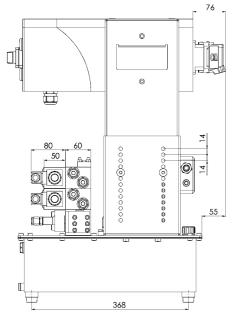
# Hydraulic diagrams with DBV and EDS:

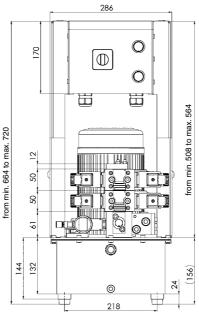
# 1 clamping circuit, double-acting

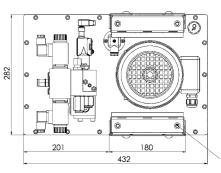
# 2 clamping circuits, double-acting











M8 thread for lifting devices

Subject to technical alterations.



# Pump unit No. 6906, 1 and 2 clamping circuits

### **Hydraulic specifications:**

Max. operating pressure 200 bar / 400 bar 10 litres Oil capacity, reservoir Oil capacity, usable 4 litres 2.5 I/min. Oil-flow rate 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

ISO VG 22 and 32 DIN 51519 Viscosity

# **Electrical specifications:**

Nominal voltage 400 V/50 Hz three-phase 24 V DC Control voltage

Valve voltage 24 V DC Motor speed 2900 1/min. Direction of rotation any Motor rating 1,1 kW

three-phase standard motor Motor type

Nominal current

Protection class

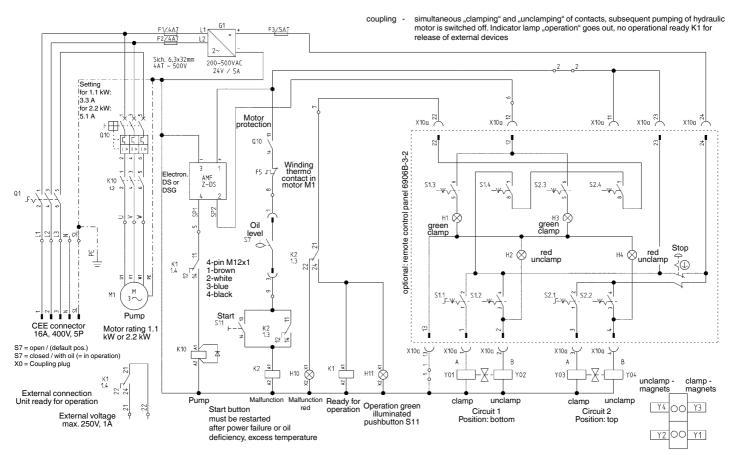
Fuse, supply line 16 A slow-blow

Fuse, control circuit 2 A primary, 8 A secondary Electrical connection Ölflex 100; 5«1,5 mm²

3 m with CEE connector 16 A 6 h 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.