

Aggregat – series: MOG 1900



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1. Technical Data

Design, scope of delivery, diagrams and technical tables and charts: enclosed

2. Brief Functional Description

Fuel oil comes through the ball valve (2), filter (3), deaeration vessel (5) in one pipe connection to the pump (1). Only the quantity of fuel oil required by the burner flows through the suction line. The max. delivery pressure is 5 bar is displayed at the pressure gauge (6).

The pump (1) increases the supply pressure up to the working pressure adjusted at the integrated overflow valve. Working pressure is displayed at the pressure gauge (7). The fuel oil flows through the pressure line (P) to the burner. Fuel oil not required by the burner flows back over the return line (R) to the deaeration vessel (5) and comes back to the pump (1). In case of working pump (1) without fuel oil consumption the complete capacity flows through the internal return line of the pump to the deaeration vessel (5).

3. Assembly

Mount the oil pan on a base/pedestal. If vibration transmission is a problem, the pan can be mounted on anti-vibration pads or the like. Connect suction, pressure and bypass (overflow) lines using screwed or flanged pipe joints. Connect the lines using suitable compensators in order to equalize different lengths and to prevent vibration transmission.

Clean the lines thoroughly before attaching them, assuring that they are tight, but not subject to strain. Do not use hemp or any other similar type of sealing material when sealing the joints.

3.1 Pipe Connections

T = suction connection (pre pressure max. 5 bar)

P = pressure connection (max. pressure 30 bar)

R = return connection (bypass)



Assure that all connections are sealed and are airtight as well as oil tight!

3.2 Electrical Connections

Before plugging in and connecting the electric motors, assure that the electrical data on the rating plates complies with the mains ratings.

The pumps must be operated in the sense of rotation designated by the arrow, which has been stamped into the body of the pump.

First open ball valve (1) before checking the sense of rotation of the electric motors!!

For motor protection, we recommend that you install a protective motor switch with an overflow (pressure relief) valve!!!

Electrical Connections:

N = neutral wire

L1, L2, L3 = rotary current motor 230/400 V or 400/690V

= earthed wire connection



All electrical connections are to be installed in conformance with the applicable regulations of the VDE (Association of German Electro technical Engineers) and as per the specifications of the local electrical supply company.

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4. Initial Operation

4.1 Before starting up the unit for the first time, fill the suction filter (2) with the fluid, which is to be pumped. First fill any long lines manually from the highest point (e.g. the tank dome) with feed fluid.

4.2 The ball valve in suction line must be open!

4.3 Set the pump's built-in overflow valve to the lowest pressure of the given pressure stage before turning the pump on. (Please also refer to Item 5, „Factory Settings“.)

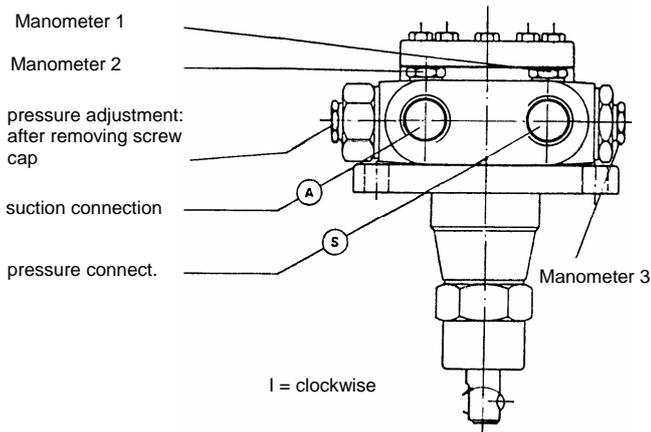
4.4 At the first commissioning ventilate the deaeration vessel well.

5. Pressure Relief Control

The pressure system has been factory set to about 15 bar. In this case, the pressure range is adjustable up to a max. 30 or 40 bar. (Pressure range either 15 to 30 or 40 bar.)

Be sure to use a properly functioning manometer when adjusting the valves! Do not set the pressure any higher than the authorized 30 bar as this will lead to blocking of the adjusting piston and to pressure thrusts which in turn will cause pump breakdown within no time at all.

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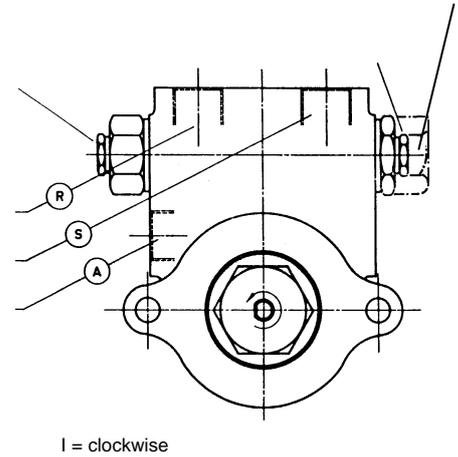


pressure adjustment:
after removing screw
cap

return connection

pressure connect.

suction connection



with integrated overflow valve
and bypass

Series VB/R

First remove the cover screw. You can now increase the pressure by using a screwdriver or an Allan key to turn the setting screw thus exposed clockwise. Turning the setting screw counter-clockwise will reduce the pressure. Bleed/air the pump via the bleeder valve during the suction process. After bleeding/airing, retighten the screw plug with the conical nipple so that no oil can escape.

6. Inspection and Maintenance

All moveable parts are lubricated automatically by the fluid as it is pumped through the unit, thus making the system practically maintenance-free.

6.1 Inspect the system's suction filter regularly for signs of dirt and leaking. Simply remove and clean the filter insert or replace it with a new one as is necessary.

6.2 When changing the filter, please assure that the vacuum as measured at the pump's suction connection is no greater than -0.6 bar Use a vacuum meter between the suction filter and the pump.

6.3 The feed pressure – measured at the same point (3) – may not be allowed to exceed 5 bar.



These installation and maintenance instructions are intended solely for the use of a specialist!

11/2007

