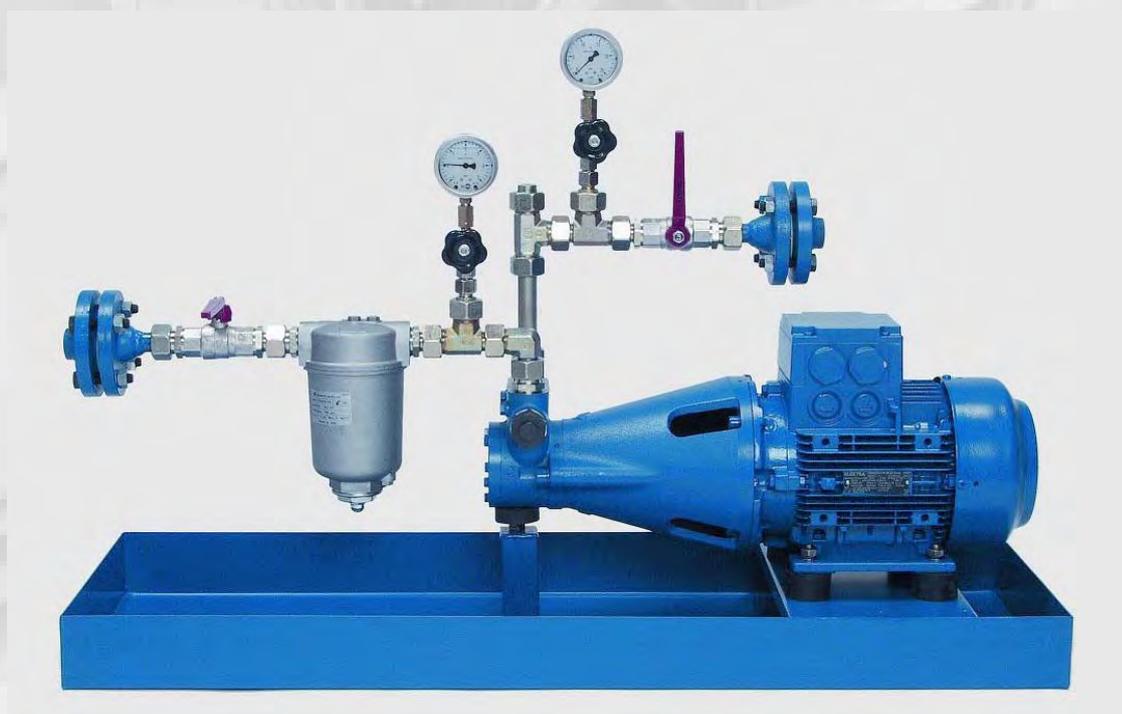


Aggregat – series: MOG



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The units have been constructed and tested as per DIN EN 12 514-1

1. Technical Data:

Refer to our main catalogue for design, delivery scope, diagrams and technical tables and charts.

2. Brief functional Description

Single fuel oil systems are equipped with two feed pumps, each with its own respective pipe systems and mountings, mounted on a mutual oil pan.

The hp internally geared pump with built-in overflow valve (1) sucks in the fluid through the suction filter (2) and simultaneously forces it into the „P“ pressure connection via the automatically opening ball valve (1).

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 The MOG 5001 to 5013 MOG fuel oil system types, contracted, inspected and registered as per DIN 4736 must always be used in conjunction with an electrical manometric switch (Accessory „S“) as a pressure line monitor (pipe burst safety device).

3.2 Pipe Connections:

T = suction connection (from tank)

P = discharge (pressure) connection (closed circular line to burner)

R = by-pass (overflow) connection

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

3.3 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 all ball valves (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 400/690 V

 = 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.

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 All ball valves 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 As the pump unit sucks in oil, bleed/aerate at the bleeder valve (6) on the delivery side.

4.5 The pump's maximum suction capacity is –0.9 bar. However, for cavitations reasons and to avoid the generation of extreme noise levels, the suction pressure must not be allowed to exceed –0.6 bar.

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4.6 The tank should be at least half full when the pump is started up for the first time!

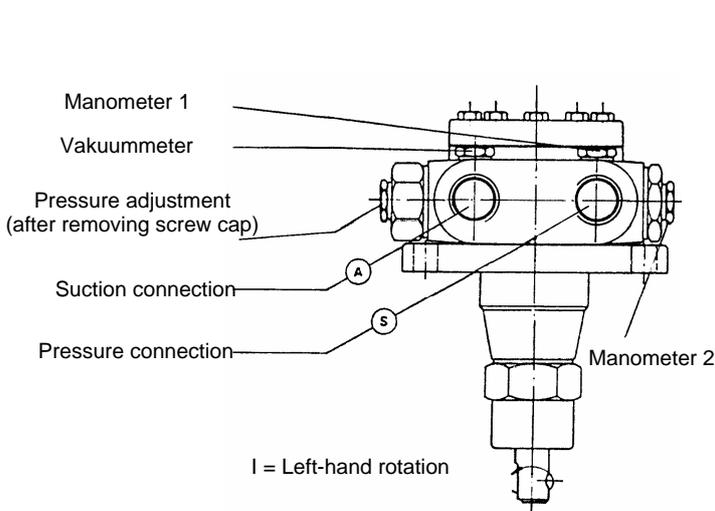
3. Pressure Relief Control valve

The built-in pressure relief (overflow) valve, with which the pumps have been equipped, has been factory set to a maximum pressure of about 6 bar. To meet any given special requirements, this valve may be reset to any desired value within a pressure range of from 2 to 9 bar.

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.)

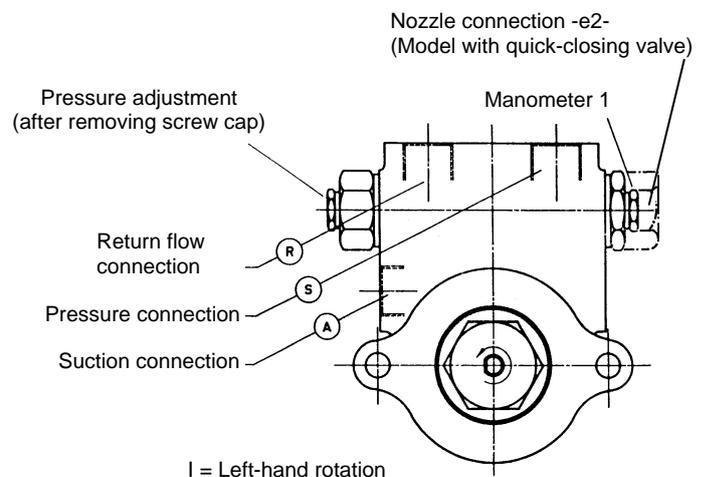
Be sure to use a properly functioning manometer when adjusting the valves!

Do not set the pressure any higher than the authorized 9, 30 or 40 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.



With integrated Overflow Valve

series VB



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 (6) 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 (3).
- 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!