

Control of system

■ Adjustment and maintenance

1. In initial operation, it may be that the bearing is not charged with lubricant sufficiently.
Therefore, first start the system with lubricant about 1.5 times of planned value, and adjust little by little to planned lubricant amount while checking the lubricating condition of bearing.
2. There are two ways of adjusting lubricant amount.
 - (1) Change the frequency of lubricating. (Change the setting of system timer 2G.)
 - (2) Change the number of cycles of distributing valve (Change the setting of counter CR.)
3. In adjusting the signal timer (timer for checking 62G lubricating), set about double of the pump operation time.
4. Always fill the pump tank with clean lubricant by use of filling pump, preventing from mixture of air and foreign substance.
5. Check the operation of distributing valve at a specified interval and inspect that the pump pressure is normal.
6. Check for damage and loosening of each piping section at a specified interval.
7. Set the pressure switch at normal operation pressure + 3 - 5 MPa.

■ Finding a trouble and countermeasure

1. If you operate the handle of manually operated pump, and do not feel ordinary resistance, and pressure does not rise, it is because air is sucked in. In this case, open the air venting screw, operate the handle, and force out air sufficiently. If the trouble is not corrected yet, the function of check valve must be poor. Clean it sufficiently.
2. In the case of automatic system of motor driven pump, alarm is issued in the situation below. Take a measure depending on circumstances.
 - a. When air mixes into pump
Pump pressure does not rise in this case. When air is intaken in the process of pressure rising, the pressure gauge indicates some fixed point, and hardly swings. In this case, loosen the pump air venting screw, and operate the pump until lubricant with air mixed is exhausted. Also, extract air in the piping by loosening some appropriate position.
 - b. If piping is leaking between the pump and parent distributing valve, the pressure hardly rises either. Correct the position of leaking.
 - c. The supply line is blocked or the piston of distributing valve does not work
In this case, the pressure gauge always indicates a high pressure, and pressure switch operates or safety valve opens. First check whether the operation of piston is disturbed by foreign material or etc.
 - d. When the function of safety valve is poor
When that the safety valve function is disturbed by contaminant, and lubricant escapes into the tank at an extremely low pressure. In this case, disassemble and clean the safety valve.
 - e. The pump and distributing valve are both highly resistant against wear. However, when the pump body is significantly worn through very long service, or when distributing valve is worn so seriously as to leak lubricant, replace the pump body with new one and replace the distributing valve with new one as appropriate.
3. Possible troubles are as described above. When the system in regular operation emits an alarm, it is more convenient to follow the step below in order to find corresponding trouble position.
 - a Check whether the thermal relay of electric control panel is normal.
 - b Check the pump unit.
It is convenient to follow the step below although it depends on the situation of pump pressure rising.
 1. Check if the tank is empty.
 2. Check for leakage from piping.