

Installation and commissioning

1. In setting a central pump system, select a place where the pump can be easily adjusted and disassembled, as well as the tank can be refilled with lubricant during operation, and dust and contaminant are less. Pump system must be partitioned specially in a place where dust and dirt are severe. Install the electric control panel in the vicinity of machine operation room or pump system. Select a place which is dry and free from vibration.
2. As for manual system, install the pump by use of frame of the machine or make a special pump mounting plate, and secure to it. Place the pump about 1m above the floor so that the tank can be charged with lubricant during machine operation and the pump and handle can be operated easily.
3. Install the strainer in a place where it can be easily disassembled and cleaned from time to time. Also determine the installation direction of strainer in sufficient consideration of lubricant being transferred. As for loop type, direction is reversed between the pump outlet and return port.
4. Mark the position of distributing valve directly on the machine with a chalk according to the piping diagram. Especially ensure that the supply line connection port on frame side of distributing valve is connected to the line 1 so that the indicator bar of all distributing valves operate in specified direction.
5. Distributing valve just as it is can be directly mounted to the frame of machine; otherwise manufacture a simple mounting plate as appropriate. Position the distributing valve at the point where indicator bar of the valve can be seen easily and lubricant can be adjusted without restriction.
6. Check the rotation direction of motor driven pump with the rotation direction nameplate attached to the pump driving motor. If the pump is rotated reversely, it does not make discharge. The rotation direction mark attached to U-series pump housing indicates the rotation direction of the pump.
7. Before starting operation of U-series pump and barrel pump, be sure to fill the housing with lubricant. Gear oil equivalent to class 2 No.5 JISK2219 is appropriate for lubricant. Oil filling port is placed on the top of pump housing.
8. Clean all pipes with acid before assembling, and then wash inside completely. Make sure absolutely that chip or the like is not left at all.
9. Pressure in the line becomes very high, therefore cut the thread of pipe very carefully. When installing a joint, wrap the thread part with sealing tape.
10. Use special care in flushing this system. Dust and dirt in the piping are sent to the bearing and result in accident, as well as to the sliding part of distributing valve, disturb operation and result in disable function. In commissioning, pay special attention to the actuation of distributing valve and condition of bearing, etc.
11. When piping of supply line (main line) is completed, connect the appropriate part of the line with oil pump or the like, and transfer flushing oil with pressure for final cleaning of main supply line. Use a pipe cleaned in advance for each branch line. If it is difficult to transfer flushing oil with a pump because of place or equipment, clean the pipe and joint with special care and blow air.
12. When flushing is finished, fill all the lines with lubricant. If air remains in the system, air is extremely compressed before reaching switching pressure, and operation takes very long, which results in abnormal function of the system. As for procedure for venting air, operate the system with the plug removed from the end of each line and distributing valve, and place the plug in sequence when grease overflows.
13. The system should operate normally here. If piping is wrong and supply line 1 does not return to its return port and is connected to another port in the case of loop type, or if the limit switch of pressure control valve is connected wrong in the case of end type, the switch valve does not reverse, so that operation is continued with pressure increased and safety valve opened. In such a case, check again that piping is not wrong.
14. This system is designed to release lubricant to the tank through the safety valve when the pressure of line has risen above the specified value. Safety valve is adjusted at 23MPa.
15. When filling the tank with grease, be sure to use a grease filling pump. It is for preventing foreign substance from mixing into grease, as well as preventing air from entering the tank. When operating the handle of grease filling pump, if you feel anything abnormal in the response from the handle, it is because of air. Be cautious. (See the selection of grease.)