

COMMISSIONING

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Pump shaft rotation must be in compliance with the pump body indicators i.e. CW means clockwise shaft rotation whilst looking from the shaft end of the pump.

Inlet and outlet pipework must be checked for connection to the correct pump ports. A case drain pipe is not required.

There are five bleed points located in the pump body. Depending upon the orientation of the pump, one or more of these bleed points must be used to ensure that the pump case is completely filled, prior to start up.

Care should also be taken to purge all air from the inlet, AND outlet pipework, prior to start up. During this operation the pump shaft should be rotated slowly to fill the rotating group.

The space which exists between the inner and outer shaft seals must, at all times be filled with a suitable, "Barrier" fluid i.e. Mesamol. Access to this space is provided by two 1/8 inch BSP ports located at either side of the mounting flange. Care must be taken to completely purge this space of all air, to allow lubrication of outer shaft seal. The supply of barrier fluid can be maintained using small transparent reservoirs, connected to access ports.

Inner seal leakage can be detected by regular inspection of the barrier fluid in the reservoirs.

Barrier fluids containing water or, that are hydroscopic or, are in any way incompatible with the pumped fluid must not be used.

Pressurisation of the barrier fluid may cause shaft seal failure. Therefore pressurised fluid or grease systems, such as a sprung dashpot and tap arrangement must not be used.

Pumps fitted with manual adjustment i.e. types MD, MB, ME have a leakage indicator port to provide access to the space between the inner and outer seals of the swash adjusting shaft. This space should be provided with the same barrier fluid reservoir systems as described in the above.

Initial start up of the pump should always take place with minimum permitted outlet pressure, running for a period of time on recirculation at full flow, to purge any air that may still be in the system.

Check and set system relief valves.

Check pump inlet and outlet pressure at the pump whilst stationary and running in all conditions. Ensure the relationship between pressures recorded is within the system design parameters and also complies with pump requirements given in this brochure.

Take fluid samples and check for cleanliness.

Measure flows within required working range and ensure, stable delivery is achieved.

Check temperatures of fluid at pump outlet and pump main case and compare with fluid temperature at pump inlet. Any significant difference (over 15 - 20°C) should be investigated.

After the first few hours operation, clean or renew (as appropriate) all filters.

OPERATION

Recommended inlet pressure should always be maintained at the inlet port at start up and during running.

Pumps fitted with manual variable displacement controls should not be adjusted when the pressure, at either port, is greater than 20 bar.

Adjustment of a manual control should always be completed by turning the control in a clockwise direction.

EXAMPLE :-

1. To increase flow. Release lock nut, turn control clockwise and lock in position.
2. To decrease flow. Release lock nut, turn control anti clockwise until two turns below required flow. then turn clockwise to required setting and lock in position.

Ensure that the system is always full of fluid otherwise immediate pump damage will occur. Barrier fluid levels should be maintained and checked for contamination regularly.

MAINTENANCE

C range pumps are self lubricating and preventative maintenance is limited to keeping system filters clean. Keep barrier lubrication systems topped up and inspected for contamination, keep all fittings and screws tight and inspect for leaks. Periodically inspect drive coupling for wear.

SERVICE

Shaft seals will wear and need periodic replacement. Seal kits are available for on site renewal and it is recommended that on site stocks are held for immediate use.

NOTE :

Units returned for factory overhaul must be flushed clean and all hazardous fluids must be neutralised before despatch to ROTARY POWER.