



For anything outside of the scope of this document please contact Flowfit or a qualified hydraulic engineer. This is provided in good faith and without liability and does not form part of any contract.

Installation

1. The fluid recommended for use in the pumps should be good quality petroleum fluid (ISO VG32-68). Viscosity of the fluid is range from 20 to 400 mm²/sec.
2. Hydraulic fluid contamination will shorten life of a pump. Please maintain hydraulic fluid quality during the operation and keep the degree of contamination within NAS class 10.
3. The suction port must be installed at least a 100 µm (150 mesh) reservoir type strainer and the return line must have a line type strainer of under 10 µm.
4. To avoid any deformation and residual stress, employ a flexible coupling whenever possible. The shafts will accept a maximum misalignment of 0.1 mm (0.004 inch). The eccentric angle should be within 1°. The maximum permissible mis-angular should be less than 0.2°.
5. The pump suction pressure must keep from -0.3 bar to 0.3 bar and suction port flow velocity must be less than 2 m/sec. For connecting pipes to the suction port, the diameter of the pipes must be same or larger than pipe flange.
6. The excess loading to the pump may cause irregular noisy when using steel tube to connect inlet port and outlet port. To avoid excess loading, please use a robbery tube.
7. The inlet tube and inlet strainer should be beneath the position of inlet port when installing the pump higher than the fluid in the tank. The position of inlet strainer and the end of drainpipe should be isolated to prevent air in fluid.



Drain Port

1. Table shows recommended drain piping size:
2. The drain port should be side up.
3. The drainpipe must connect directly to the oil tank. The position of drainpipe should be lower than the fluid in the tank and far away from inlet strainer.
4. The backpressure drain port should be less than 1 bar.

Recommended drain piping size

Model	Pipe connection size	Pipe Inner Diameter	Pipe Length
PVS08	More than 3/8"	More than Ø7.6	Less than 1m
PVS16/22	More than 3/8"	More than Ø8.5	Less than 1m
PVS36/46	More than 1/2"	More than Ø12	Less than 1m
PVS70	More than 3/4"	More than Ø17	Less than 1m
PVS100	More than 3/4"	More than Ø17	Less than 1m

Starting Pump



1. Before starting the pump, you need to fill appropriate hydraulic fluid into the case of the pump body and check hydraulic fluid for cleanliness.

Right table shows hydraulic fluid case capacity.

2. The pump rotation should be same direction indicated by arrow.

3. Trapped gas in the interior pump and piping will cause irregular noise and vibration. Please exhaust the gas without any load before starting the pump.

Recommended drain piping size

Model	Amount (cm ³)
PVS08	220
PVS16/22	300
PVS36/46	650
PVS70	1000
PVS100	1800

Setting the pressure and flow rate

The flow rate is set at maximum and the pressure is set at minimum at the factory.

We recommend follow the following procedure to adjust the pressure and the flow rate.

Pressure adjustment: Turn the adjusting screw clockwise to increase pressure.

Flow rate adjustment: Turn the adjusting screw clockwise to decrease the flow rate.

