

Hydraulic Pump for Forklift

Forklift Hydraulic Pump - Normally utilized within hydraulic drive systems; hydraulic pumps can be either hydrostatic or hydrodynamic.

A hydrodynamic pump may also be considered a fixed displacement pump since the flow throughout the pump for each pump rotation could not be changed. Hydrodynamic pumps can also be variable displacement pumps. These models have a much more complex assembly which means the displacement can be changed. Conversely, hydrostatic pumps are positive displacement pumps.

Nearly all pumps are functioning in open systems. Usually, the pump draws oil from a reservoir at atmospheric pressure. For this particular method to run smoothly, it is imperative that there are no cavitations occurring at the suction side of the pump. In order to enable this to work right, the connection of the suction side of the pump is larger in diameter than the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is typically combined. A general option is to have free flow to the pump, meaning the pressure at the pump inlet is at least 0.8 bars and the body of the pump is often in open connection with the suction portion of the pump.

In a closed system, it is all right for there to be high pressure on both sides of the pump. Usually, in closed systems, the reservoir is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, usually axial piston pumps are used. As both sides are pressurized, the pump body needs a separate leakage connection.