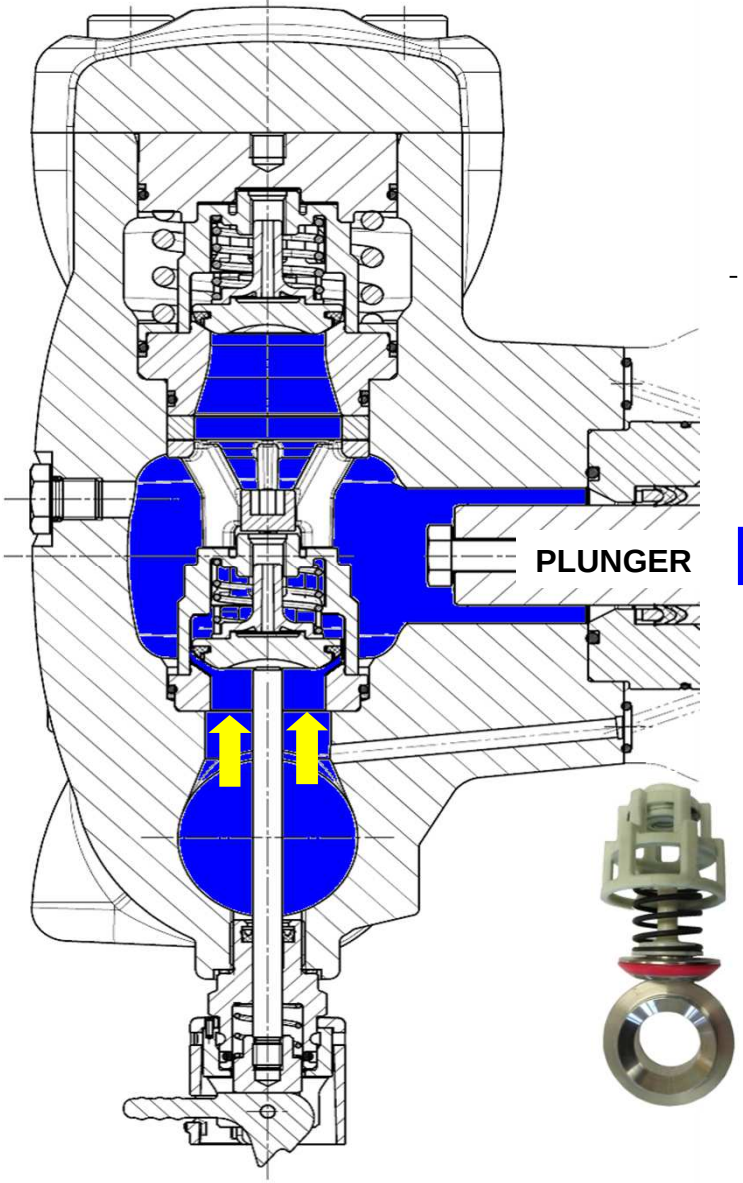
Pratissoli

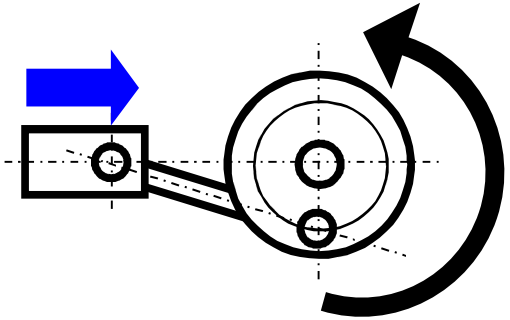
Pump Design

How do they work

Fluid end (suction delivery valves)



Plungers travel back and forth according to the crank mechanism to which they are connected.



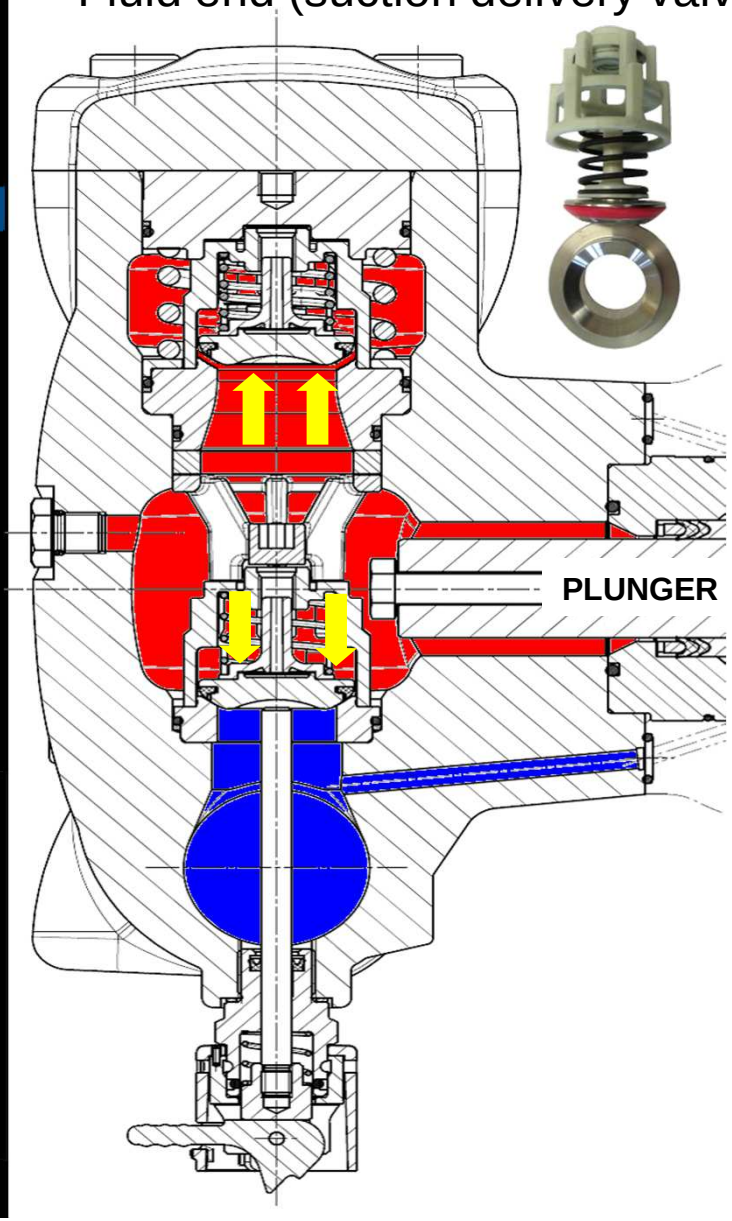
During the suction stroke the plunger moves backwards generating a vacuum that makes the suction valve open and fill the compression chamber.

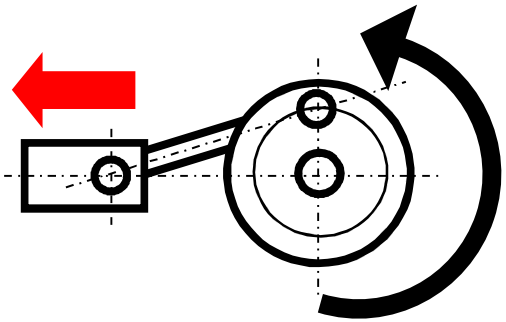
Pratissoli

Pump Design

How do they work

Fluid end (suction delivery valves)





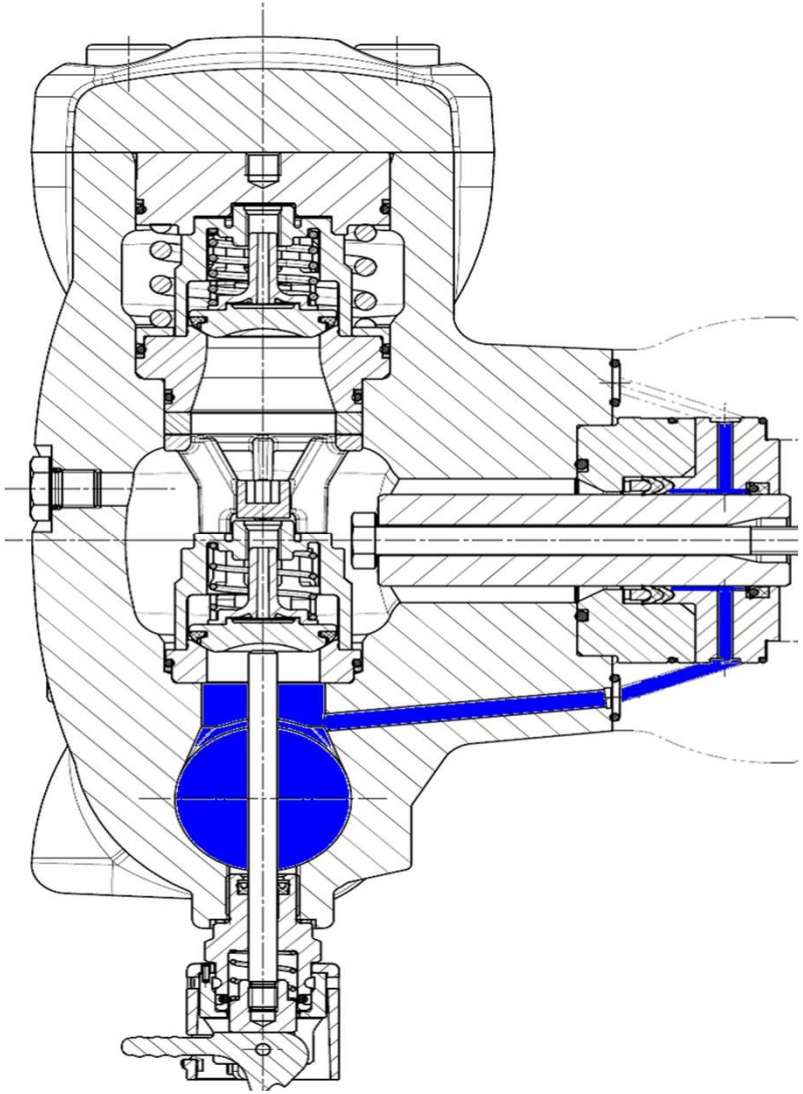
After reaching the dead lower center the plunger starts its delivery stroke, the suction valve closes and, in turn, the delivery valve opens., (fig.2)

Pratissoli

Pump Design

How do they work

Lubrication during operation (PACKINGS)



Packings lubrication
High & Low pressure packing design provides a water seal against air suction from the rear of the cylinder during the suction stroke. Pressure packings are lubricated by inlet water, resulting in a longer packings and plungers life due to the lower operating temperature and friction produced.

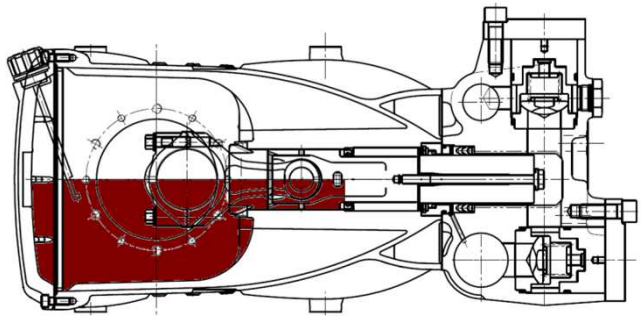
Pratissoli

Pump Design

How do they work

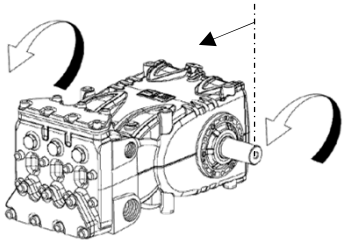
Lubrication during operation (POWER END)

Crank mechanisms are splash lubricated.
Oil specifications, time intervals for inspection, minimum speed requirements and changes are all illustrated in the Owner's manual supplied in a CD with each pump.



In spite the pump can turn in both directions of rotation the preferred crankshaft rotation is always:

TOP OF INPUT SHAFT TO THE FLUID END



And, in case of gear box installed:

TOP OF THE GEAR SHAFT AWAY FROM FLUID END