

Functioning principle

As the liquid passes continuously the measuring chamber it causes the oscillating movement of the piston contained in it. The chamber is divided in two parts whatever the position of the piston, so that no direct connection is possible between the entrance and exit. Therefore, a well-defined volume of product transported from the entrance to the exit and recorded by the metering system corresponds to every complete oscillation of the piston.

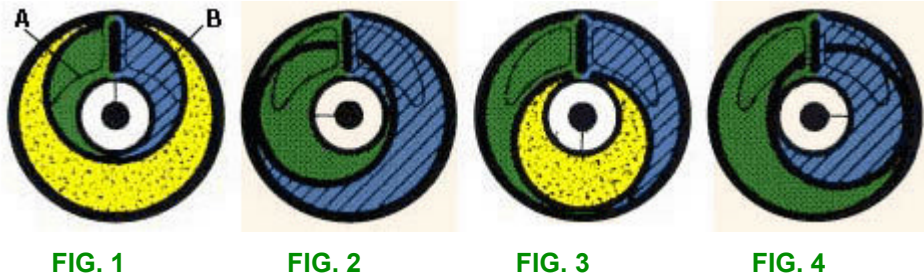


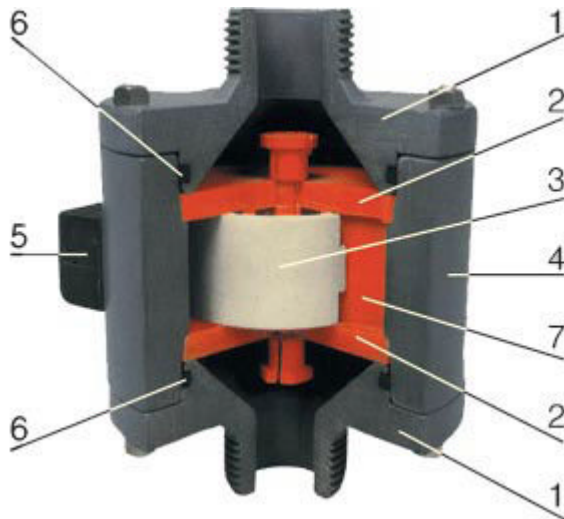
FIG. 1 The piston is found above entrance A. The incoming liquid presses on the wall of the piston and causes semi-rotation to start, up to the lower tip of the diaphragm.

The liquid between the wall of the piston and the chamber is transferred and expelled from discharge outlet B.

FIG. 2 This shows the movement of the piston as the liquid enters.

FIG. 3 The liquid has completely filled the available space on entering, and starts going out through the discharge outlet.

FIG. 4 The piston has stopped oscillating and the measured liquid is completely expelled from outlet B. The piston is ready to transfer some more product.



The liquid passing in a continuous manner through the measuring chamber causes the oscillatory movement of the piston contained in it. The permanent magnets are inserted in the piston. The REED sensor positioned to outside of the meter detects the movement of the piston and sends to reading systems of the pulses that are totalized and processed. Even a very small volume of liquid causes the movement of the piston and it is the basis of its excellent repeatability. The flow meters KPO CRAIND series have only the piston in movement and this ensures long life and ease of maintenance.

- 1 - End plate
- 2- PC plate assd.
- 3- Piston
- 4 - Body
- 5 - Sensor REED
- 6 - O.R.
- 7 - Barrier