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Title SEALING SYSTEM FOR HIGH PRESSURES

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Short presentation

The invention relates to a sealing system which can be used in the construction of a hydraulic or pneumatic pump or motor, preferably operating at relatively high pressures. According to the invention, the system comprises a cylinder (2) wherein a piston (1) slides driven by a crank shaft (3), having a tight chamber of variable volume (6) confined by a membrane (4) and a cover (5), as well as a metallic membrane (4) of a shape of revolution, having a cylindrical part with a corrugated zone (4a) playing the role of a spring, at one end having a flanged edge (4b) by means of which it is tightly fixed between the cylinder (2) and the cover (5), using some screws (9) while, at the other end (4c) facing the piston (1), the membrane (4) may be either closed or open.

Applicability

The invention relates to a sealing system without flow losses, which can be used in the construction of hydraulic or pneumatic pumps and motors, especially those operating at high pressures.

The sealing system according to the invention has the following advantages:

- 100% volumetric efficiency (does not lose liquid)
- simple construction and high reliability
- can be made of materials resistant to corrosion or various chemical agents.

Images





