

The invention relates to the field of compressor engineering, in particular to the membrane compressors, operating under the liquid power action, and may be used for obtaining compressed up to high pressures gases and vacuum, free from oil vapours impurities.

Summary of the invention consists in driving out the compressed gas from the working chambers by means of the working fluid, present into a closed hydraulic system under overpressure about the pressure from outside the system. The gas, by turns supplied into the working chambers of the membrane compressor, is driven out there from under the power action exercised upon it through the elastic membranes from the end of the working fluid. The change over of the working fluid flows from one chamber into another is carried out by means of the flow distributor, supported in bearings and connected to the pump by the supply pipe-line and the drainage pipe-line. The working fluid, supplied into one of the working chambers through the pipe-lines, is simultaneously supplied to one of the inlets of the flow distributor control device, which under the pressure of the working fluid changes from one stable position to another. At the change-over the control device being in mechanical interaction by engagement means with the flow distributor, changes over the latter to another position, thus changing the direction of the working fluid flows.

The proposed membrane compressor, provided with the proposed flow distributor and control device, is able to function with high capacity in any earth, sub aquatic, cosmic exploitation conditions that substantially extends its functional and exploitation possibilities.

Claims: 12

Fig.: 6