

The invention relates to the mechanical engineering, namely to the rotor-type hydraulic machines.

The hydraulic machine contains a stator (3) with internal gear ring (4), a rotor (5) with external gear ring, eccentrically placed inside the stator with the formation of working chambers and rigidly joined with the shaft (1), frontal distributors (11, 12), wherein there are made canals for inlet (13) and outlet (14) of the working fluid and, coupled therewith, annular cavities (21-24) with axial canals (17-20), bushes (33, 34) coaxially mounted into each of the frontal distributors and high-pressure packing rings (35, 36), placed between the frontal distributors and the rotor. Into each frontal distributor there are made two annular cavities, at the same time two annular cavities (21, 22), made respectively into both distributors, are coupled by an axial canal (28) into the stator with the canal for working fluid inlet, and the other two (23, 24) – by another axial canal (32) into the stator with the canal for working fluid outlet, into each bush there are installed from the end of the rotor low-pressure packing rings (37, 38) and made two axial stepped canals (42-45), into each of which there is mounted a check valve (46-49), the inlet of each being coupled with the cavity between the packing rings, and the outlet - with the working fluid outlet canal.

Claims: 1

Fig.: 2

