

Title (en)

AXIAL PISTON MACHINE WITH DAMPING ELEMENT FOR THE INCLINED OR WOBBLE PLATE

Title (de)

AXIALKOLBENMASCHINE MIT DÄMPFUNGSELEMENT FÜR DIE SCHRÄG- ODER TAUMELSCHEIBE

Title (fr)

MACHINE A PISTONS AXIAUX COMPORTANT UN ELEMENT D'AMORTISSEMENT POUR LE DISQUE INCLINE OU OSCILLANT

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Application

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Abstract (en)

[origin: DE19645580C1] The invention concerns an axial piston machine (1) which comprises a cylinder block (2) having cylinder bores (3, 4) in which pistons (5, 6) are movably guided, said pistons (5, 6) being supported on an inclined or wobble plate (25) in order to perform a lifting movement. The axial piston machine (1) further comprises a pivot device (31) for varying the inclination of the inclined or wobble plate (25) by pivoting about a pivot axis (27). The development according to the invention is provided with a damping element (41) which comprises a damping piston (40) which acts on the inclined or wobble plate (25) and is movably disposed in a damping cylinder (42) which is connected to a pressure fluid reservoir (48) via a throttle element (47) and a non-return valve (44) disposed parallel thereto. The non-return valve (44) enables pressure fluid to flow in an unthrottled manner from the pressure fluid reservoir (48) into the damping cylinder (42) and prevents the pressure fluid from flowing out of the damping cylinder (42) in an unthrottled manner by bypassing the throttle element (47). In this way, a damped pivot movement of the inclined or wobble plate (25) is brought about.

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