

Title (en)
CAMSHAFT ADJUSTER

Title (de)
NOCKENWELLENVERSTELLER

Title (fr)
DISPOSITIF DE REGLAGE D'ARBRE A CAMES

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Application
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Abstract (en)
[origin: WO2005113943A1] The invention relates to a camshaft adjuster, for the relative angular adjustment of a camshaft with relation to a driving crankshaft, comprising a hydraulically-operated adjuster device with chambers, into which and from which a hydraulic fluid may be alternately introduced or drained through pressure medium channels specific for the chambers to adjust the angle, and a control valve through which the hydraulic fluid supplied by a pump may be introduced into the pressure medium channels or drained from the pressure medium channels into a tank, whereby working connections (A) and (B), leading to the pressure medium channels, a pressure connector (P), coupled to the pump and a drain connector (T), coupled to the tank, are provided on the valve body of the control valve. Said working connections (A) and (B) may be selectively coupled to the pressure connector (P), or the drain connector (T) depending on the desired angle adjustment, by means of a valve piston, the displacement of which is controlled by a remote push- or pull-type solenoid, arranged outside the camshaft, whereby the fluid distribution chamber in the control valve (1, 20, 26, 34) is embodied such that the hydraulic fluid acts on essentially opposed surfaces of the valve piston (4, 22, 28, 36) such that local and essentially opposed forces (Fp1, Fp2) act on said valve piston (4, 22, 28, 36).

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