

Title (en)
HYDRAULIC VALVE ACTUATOR FOR ACTUATING A GAS EXCHANGE VALVE

Title (de)
HYDRAULISCHER VENTILSTELLER ZUM BETÄTIGEN EINES GASWECHSELVENTILS

Title (fr)
ACTIONNEUR HYDRAULIQUE DE SOUPAPE SERVANT A ACTIONNER UNE SOUPAPE D'ECHANGE DE GAZ

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Application
EP 03714677 A 20030305

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Abstract (en)
[origin: WO2004022929A1] The invention relates to a hydraulic valve actuator for actuating a gas exchange valve (10) in a combustion cylinder of an internal combustion engine. Said valve actuator comprises an actuating piston (16) defining two pressure chambers (17, 18). The lower pressure chamber (18) acting in the valve closing direction is permanently subjected to a liquid pressure, and the upper pressure chamber (17) can be selectively subjected to a liquid pressure or relieved thereof by means of an admission and a reflux (22, 23). In order to moderate the gas exchange valve (10) in the end phase of the closing process, and thus to reduce the impact speed, the reflux (23) of the upper pressure chamber (17) is split into two interspaced, interconnected outflow openings (231, 232) arranged in the housing (15). A throttle region (29) is associated with the upper outflow opening (231), and the lower outflow opening (232) can be displaced in relation to the actuating piston (16) and is arranged in the displacement path of the piston in such a way that it can be closed by the same at a defined distance from its upper end position.

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