

Title (en)

ELECTROMAGNETIC ACTUATOR FOR ACTUATING AN INTERNAL COMBUSTION ENGINE VALVE

Title (de)

ELEKTROMAGNETISCHER AKTUATOR ZUR BETÄTIGUNG EINES BRENNKRAFTMASCHINEN-HUBVENTILES

Title (fr)

ACTIONNEUR ELECTROMAGNETIQUE SERVANT A ACTIONNER UNE SOUPAPE D'UN MOTEUR A COMBUSTION INTERNE

Publication

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Application

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Abstract (en)

[origin: DE19926413A1] The invention relates to an electromagnetic actuator for actuating an internal combustion engine valve. Said actuator comprises an armature oscillating between two magnet coils, said armature having a shaft that is guided in the actuator, one end segment of said shaft acting upon the shaft of the valve. According to the invention, the armature shaft consists of a material, at least in certain areas, whose specific weight is lower than that of steel. If an inductive measuring system for detecting the position of the armature is provided in the electromagnetic actuator close to the other end of the armature shaft, the latter then consists of a material, at least in the area of said measuring system, whose relative permeability is considerably lower than that of steel. Preferably, the armature shaft is embodied completely or partially in titanium or titanium alloy or ceramic.

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