

Title (en)

CONTROL VALVE WITH PRESSURE COMPENSATION FOR A FUEL INJECTOR COMPRISING A PRESSURE INTENSIFIER

Title (de)

SCHALTVENTIL MIT DRUCKAUSGLEICH FÜR EINEN KRAFTSTOFFINJEKTOR MIT DRUCKVERSTÄRKER

Title (fr)

SOUPAPE DE COMMANDE A COMPENSATION DE PRESSION POUR UN INJECTEUR DE CARBURANT COMPRENANT UN MULTIPLICATEUR DE PRESSION

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2005015000A1] The invention relates to a fuel injector comprising a pressure intensifier (3) that is supplied with high-pressure fuel from a pressure source (1). A working chamber (4) of the pressure intensifier (3) is separated from a differential pressure chamber (6) of the pressure intensifier (3) by means of a pressure relay piston (5). The differential pressure chamber (6) of the pressure intensifier (3) is relieved of pressure and subjected to pressure by means of a control valve (22). Said control valve is connected to the differential pressure chamber (6) by means of a control line (10). A pressure chamber (12) on an injection valve element (13) is connected to a compression chamber (8) of the pressure intensifier (3) by means of a pressure chamber supply line (11). The control valve (22) is embodied as a directly switching 3/2 distributing valve, the valve needle (23, 31) thereof being pressure-compensated and comprising both a sealing seat (24) and a slide seal (25).

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F02M 57/02; **F02M 59/46**

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