

Title (en)

PRESSURE LIMITING VALVE FOR FUEL INJECTION DEVICES

Title (de)

DRUCKBEGRENZUNGSVENTIL FÜR KRAFTSTOFF-EINSPRITZEINRICHTUNGEN

Title (fr)

SOUPAPE DE LIMITATION DE PRESSION POUR DES DISPOSITIFS D'INJECTION DE CARBURANT

Publication

EP 1694958 B1 20080326 (DE)

Application

EP 04798002 A 20041119

Priority

- EP 2004013142 W 20041119
- DE 10355124 A 20031124

Abstract (en)

[origin: WO2005054663A1] The invention concerns a pressure limiting valve (1) for fuel injection devices, in particular for fuel injection devices produced in the form of supply manifold systems. The inventive pressure limiting valve comprises a housing (2) including a high pressure connection (5) on the intake side, a backflow connection (9), as well as a flow connection located between said two connections and controlled by a valve element (7) which is guided mobile in the housing (2) and which is sealingly spring-biased towards a valve seat (6) on the intake side in the direction of its locking position. Said valve element opens, while being limited by a stop, via a high pressure applied on the intake side and its surfaces pressurized to counter the spring force are larger in the opening position releasing the flow connection than in the locking position. Since the valve element (7) is coupled, in terms of displacement, to a surface (17) of a piston (12) mobile in the housing (2), said surface being capable of being pressurized to move the valve element (7) in the opening position, it is possible in certain operating conditions, in particular when the engine is stopped for maintenance, to open the valve regardless of the dimensioning of the pressure limiting valve so as to reduce to a selectable predefined level the pressure in the connected fuel device.

IPC 8 full level

F02M 63/02 (2006.01)

CPC (source: EP)

F02M 63/0052 (2013.01); **F02M 63/0225** (2013.01); **F02M 63/026** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005054663 A1 20050616; AT E390556 T1 20080415; DE 10355124 A1 20050721; DE 10355124 B4 20050922; EP 1694958 A1 20060830; EP 1694958 B1 20080326

DOCDB simple family (application)

EP 2004013142 W 20041119; AT 04798002 T 20041119; DE 10355124 A 20031124; EP 04798002 A 20041119