

Title (en)
FUEL INJECTOR WITH A NOZZLE NEEDLE ASSEMBLY

Title (de)
KRAFTSTOFFINJEKTOR MIT EINER DÜSENNADEL-BAUGRUPPE

Title (fr)
INJECTEUR DE CARBURANT AVEC UN ENSEMBLE AIGUILLE D'INJECTEUR

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Abstract (en)
[origin: WO2011104110A1] The invention relates to a fuel injector for a fuel injection system, in particular a common rail injection system, having a nozzle body (1) and having an injector body (2), wherein in the nozzle body (1) there is formed a high-pressure bore (3) for accommodating a nozzle needle (4) which can perform a stroke movement and by means of the stroke movement of which at least one injection opening (5) can be opened up or closed off, and wherein in the injector body (2) there is formed a low-pressure chamber (6) for accommodating a piezoelectric actuator (7), which low-pressure chamber can be or is hydraulically coupled via a coupling device (8) to the nozzle needle (4) in such a way that the nozzle needle (3) assumes the closed position thereof when the piezoelectric actuator (7) is electrically discharged. According to the invention, the coupling device (8) comprises a first and a second disk-shaped coupler body (9, 10) with in each case one cylinder bore (11, 12) for accommodating in each case one coupler piston (15, 16) which delimits a coupler chamber (13, 14). The invention also relates to a method for the manufacture and/or assembly of a nozzle needle assembly for a fuel injector.

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