

Title (en)

NOZZLE ASSEMBLY FOR AN INJECTION VALVE AND INJECTION VALVE

Title (de)

DÜSENBAUGRUPPE FÜR EIN EINSPRITZVENTIL UND EINSPRITZVENTIL

Title (fr)

MODULE BUSE POUR SOUPAPE D'INJECTION, ET SOUPAPE D'INJECTION CORRESPONDANTE

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Application

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Abstract (en)

[origin: WO2011029941A1] The invention relates to a nozzle assembly (10) for an injection valve, comprising a nozzle body (12), in which a nozzle body cutout (14) and at least one injection opening (24) are disposed, wherein the nozzle body cutout (14) can be hydraulically coupled to a high-pressure circuit of a fluid and the injection opening (24) is hydraulically coupled to the nozzle body cutout (14), and further comprising at least one nozzle needle (18) that is disposed axially movably in the nozzle body cutout (14) and has a central axis (Z) and a needle point (20), wherein the needle point (20) interacts with a wall (16) of the nozzle body cutout (14) such that, in a closed position, the nozzle needle (18) prevent fluid from flowing through the at least one injection opening (24) and, in an open position, releases a fluid flow through the at least one injection opening (24). Cutouts and/or elevations (66, 68, 70, 72, 74) designed as microstructures are disposed at least one the needle point (20) and/or in the wall (16) of the nozzle body (12) and/or in a wall (60) of the at least one injection opening (24). By means of the cutouts and/or the elevations (66, 68, 70, 72, 74), a predefined intensity of the turbulence of the fluid in the at least one injection opening (24) can be generated. The invention further relates to an injection valve comprising a nozzle assembly (10) and an actuator (11), wherein the actuator (11) is designed to act on the nozzle assembly (10).

IPC 8 full level

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