

Title (en)
INJECTION VALVE WITH A TRANSMISSION ASSEMBLY

Title (de)
EINSPRITZVENTIL MIT ÜBERTRAGUNGSEINHEIT

Title (fr)
SOUPAPE D'INJECTION AVEC UN ENSEMBLE DE TRANSMISSION

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Application
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Abstract (en)
[origin: WO2010142767A1] The invention relates to an injection valve (1) for injecting fuel into an internal combustion engine, comprising an actuator (7) and an injection needle (5) that is associated with a sealing seat (10). A hydraulic transmission unit (40) is provided which establishes an effective connection between the actuator (7) and the injection needle (5). The transmission unit (40) includes two movable pistons (12, 17), between which a movable pot (42) is arranged. The movable pot (42) is guided within another stationary pot (14). The first piston (12) is guided through the bottom (13) of the other pot (14) while maintaining a third sealing gap (49), and the second piston (17) is guided within a sleeve section of the pot (42) while maintaining a fourth sealing gap (50). A first chamber (46) is formed between the other pot (42) and pot (14), and a second chamber is formed between pot (14) and the second piston (17). The two chambers (46, 47) are interconnected via at least one duct (44, 45). One piston (12, 17) is effectively connected to the injection needle (5), and the other piston (12, 17) is effectively connected to the actuator (7).

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