

Title (en)
VALVE ASSEMBLY FOR AN INJECTION VALVE AND INJECTION VALVE

Title (de)
VENTILANORDNUNG FÜR EIN EINSPRITZVENTIL UND EINSPRITZVENTIL

Title (fr)
ENSEMBLE DE SOUPAPE POUR SOUPAPE D'INJECTION ET SOUPAPE D'INJECTION

Publication
EP 3339628 A1 20180627 (EN)

Application
EP 17159254 A 20170303

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Abstract (en)
A valve assembly (3) is disclosed. It comprises a valve body (4), a valve needle (11), a stationary pole piece (25) and a moveable armature (23) of an electro-magnetic actuator unit (19). The pole piece (25) has a central axial opening (26) and is in one piece with the valve body (4) or fluid-tightly fixed to the valve body (4) so that fluid flowing through a cavity (9) of the valve body (4) from a fluid inlet portion (5) to a fluid outlet portion (7) has to flow through the central axial opening (26). The armature (23) and the valve body (4) shape a radial gap (34) between an inner surface of the valve body (4) and an outer surface (31) of the armature (23), the radial gap (34) defining an axial fluid channel along the outer surface (31) of the armature (23). An axial gap (32) is shaped between a lower surface (29) of the pole piece (25) and a top surface (27) of the armature (23), the axial gap (32) defining a radial fluid path from an aperture of the central axial opening (26) of the pole piece (25) to the radial gap (34) between the inner surface of the valve body (4) and the outer surface (31) of the armature (23). The lower surface (29) of the pole piece (25) and the top surface (27) of the armature (23) are unperforated so that fluid flowing through the cavity (9) from the fluid inlet portion (5) to the fluid outlet portion (7) has to pass the axial gap (32). Further, an injection valve (1) with the valve assembly (3) is disclosed.

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Citation (search report)
• [X] WO 2016116749 A1 20160728 - SENTEC LTD [GB]
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