

Title (en)
Thermal compensation arrangement and injection valve

Title (de)
Thermische Kompensationsanordnung und Einspritzventil

Title (fr)
Agencement de compensation thermique et soupape d'injection

Publication
EP 2141346 B1 20110119 (EN)

Application
EP 08012064 A 20080703

Priority
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Abstract (en)
[origin: EP2141346A1] Thermal compensation arrangement (12) comprising a housing (14) including a first central longitudinal axis (A), the housing (14) comprising a cavity (22), a solid state actuator unit (16) being arranged in the cavity (22) and having a first axial end (16a) and a second axial end (16b), the second axial end (16b) acting as a drive side of the actuator unit (16), and a thermal compensation unit (18) being arranged in the cavity (22) and being coupled to the first axial end (16a) of the actuator unit (16). The thermal compensation unit (18) comprises a casing (40) being coupable to the housing (14) and comprising a recess (42), a piston (44) axially movable in the recess (42) and being coupable to the actuator unit (16), the piston (44) having a first front surface (58) facing the solid state actuator unit (16) and a second front surface (59) facing away from the first front surface (58), a gap (62) being formed in the recess (42) and extending in radial direction between the piston (44) and the casing (40), and a piston channel (68) being arranged in the piston (44) and extending from the first front surface (58) to the second front surface (59) of the piston (44) thereby enabling a fluid flow through the piston channel (68). The piston channel (68) comprises a converging section (70), which converges towards the first front surface (58) of the piston (44).

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