

Title (en)
Metering device with thermal compensator unit

Title (de)
Dosiergerät mit Thermalkompensationseinheit

Title (fr)
Doseur avec unité de compensation thermique

Publication
EP 1391608 B1 20050608 (EN)

Application
EP 02018666 A 20020820

Priority
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Abstract (en)
[origin: EP1391608A1] The invention relates to a metering device comprising a housing (12) having a metering opening (22), controllable by the movement of an axially moveable valve needle, an axially extendable piezoelectric actuator (28) cooperating with the valve needle to control its axial movement, and a thermal compensator unit (30) to compensate for different thermal expansion of the housing (12) and the piezoelectric actuator (28). According to the invention the thermal compensator unit (30) comprises a compensator housing (32) and a hydraulic piston (34), disposed axially slidable within the compensator housing (32), the compensator housing (32) and the piston (34) forming a first fluid chamber (36), a second fluid chamber (38) and a throttling passage (40) connecting the first (36) and second fluid chamber (38), and means for transmitting an axial extension of the piezoelectric actuator (28) to the compensator housing (32) or to the piston (34) to urge a hydraulic fluid from the first fluid chamber (36) to the second fluid chamber (38) in an activation phase of the piezoelectric actuator (28). <IMAGE>

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IPC 8 full level
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CPC (source: EP)
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