

Title (en)

FLUID INJECTOR FOR AN INTERNAL COMBUSTION ENGINE COMPRISING A PRESSURE COMPENSATOR ELEMENT

Title (de)

FLUIDINJEKTOR FÜR EINEN VERBRENNUNGSMOTOR MIT EINEM DRUCKAUSGLEICHSELEMENT

Title (fr)

INJECTEUR DE FLUIDE POUR MOTEUR À COMBUSTION INTERNE COMPRENANT UN ÉLÉMENT COMPENSATEUR DE PRESSION

Publication

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Application

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Priority

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Abstract (en)

[origin: EP3816431A1] The invention relates to a pressure compensator element (200) for a fluid injector (100) for an internal combustion engine, wherein the pressure compensator element (200) extends along a central longitudinal axis (180) and comprises:- a containment ring (230) which comprises an elastic material and is configured to deform elastically when the pressure acting on the pressure compensator element (200) changes;- a first ring (210) which is arranged at or in the containment ring (230) at a first portion of the containment ring (230) and extends out of the containment ring (230);- a second ring (220) which is arranged at or in the containment ring (230) at a second portion of the containment ring (230) and extends out of the containment ring (230), wherein the second portion of the containment ring (230) is arranged at a different axial position at the containment ring (230) with respect to the first portion of the containment ring (230), wherein an elastic deformation of the containment ring (230) due to a change of the pressure acting on the pressure compensator element (200) results in an axial displacement of the first portion of the containment ring (230) with respect to the second portion of the containment ring (230) and therefore in an axial displacement of the first ring (210) with respect to the second ring (220).

IPC 8 full level

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