

Title (en)

Constant-pressure delivery valve for fuel injection pumps.

Title (de)

Gleichdruckventil für Kraftstoffeinspritzpumpen.

Title (fr)

Soupape de refoulement à pression constante pour les pompes d'injection de combustible.

Publication

EP 0153490 A1 19850904 (DE)

Application

EP 84116229 A 19841222

Priority

DE 8404021 U 19840210

Abstract (en)

1. Constant pressure-valve for fuel injection pumps, with a resilient annular valve plate (14) in the form of a spring plate with a central passage (17), and with two valve-seat bodies (10; 11) resting against one another, each with a valve seat (12, 13) for the valve plate (14) which is located between them and which rests by means of one edge (17a) of the passage (17) against the first valve seat (12) of the first valve-seat body (10) and by means of an outer edge (14a) against the second valve seat (13) of the second valve-seat body (11), the first valve-seat body (10) having at least two continuous passage channels (18, 19) extending axially in the first valve-seat body (10) between the first and second valve seats (12, 13) and offset relative to one another in the peripheral direction, and the second valve-seat body (11) having a central through-bore (24), and further-more the first valve-seat body (10) being made disc-like, being installed facing a pump working space (32) of the fuel injection pump and receiving the valve plate (14) centrally in a circular recess (15) within its end face (10a) facing the second valve-seat body (11), characterized in that the second valve-seat body (11; 11') is also made disc-like, in that moreover one of the passage channels (19; 19') is equipped with a return-flow throttle (19a; 19a'), and in that, furthermore, the return-flow throttle (19a; 19a') is constantly in communication with a groove (21; 21') which forms a fuel passage (16; 16') and starts outside the outer edge (14a) of the valve plate (14; 14') and therefore outside the second valve seat (13; 13') in the end face (10a, 10a') of the first valve-seat body (10; 10') resting against the second valve-seat body (11; 11'), and which extends continuously in the cylindrical wall of the recess (15; 15') and partially in its bottom (20; 20').

Abstract (de)

Bei einem Gleichdruckventil für Kraftstoffeinspritzpumpen mit zwei im Abstand angeordneten, jeweils einen Ventilsitz (12,13) tragenden Ventilsitzkörpern (10,11) und einer dazwischen liegenden federnden ringförmigen Ventilplatte (14), die im Umgebungsbereich der Ringöffnung (17) an dem ersten Ventilsitzkörper (10) und im Umgebungsbereich ihres Außenumfangs an dem zweiten Ventilsitzkörper (11) anliegt, sind zwecks exakter Reproduzierung einer toleranzgenauen Rückströmdrossel und Erzielung eines hohen Einspritzdruckes im ersten Ventilsitzkörper (10) mindestens zwei durchgängige, im Bereich zwischen den Ventilsitzen (12,13) mündende Durchlaßkanäle (18,19) vorgesehen, von denen einer als Rückströmdrossel ausgebildet ist. Der zweite Ventilsitzkörper (11) weist eine zentrale Durchgangsbohrung (24) auf. Das Gleichdruckventil wird so in die Kraftstoffeinspritzpumpe eingebaut, daß der erste Ventilsitzkörper (10) den Pumpenarbeitsraum (32) abschließt.

IPC 1-7

F02M 59/46

IPC 8 full level

F02M 59/46 (2006.01)

CPC (source: EP)

F02M 59/462 (2013.01)

Citation (search report)

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