

Title (en)
Pressure accumulator.

Title (de)
Druckakkumulator.

Title (fr)
Accumulateur de pression.

Publication
EP 0078031 A1 19830504 (DE)

Application
EP 82109758 A 19821022

Priority
US 31481281 A 19811026

Abstract (en)

1. Pressure accumulator having a housing (50) defining an elongated cylindrical chamber in which a multi-piston arrangement (52) is slidably disposed, with at least two pistons arranged in series in the longitudinal direction of the housing so as to enclose a generally incompressible fluid between them, each piston having a circumferential sealing arrangement (54, 58, 60 and 64, 68, 70, respectively), and so as to divide the chamber into a first and a second zone (72 and 74, respectively), the first of which is closed and sealed by an end cap (80) having a gas valve (92) and the second by an end cap (82) having a fluid connection bore (88), characterised in that the multipiston arrangement (52) consists of piston heads (52a, 52b) independent of one another and arranged to float freely and which are disposed at a mutual spacing in the longitudinal direction of the housing (50), the piston head (52a) facing the first zone (72) of the chamber has a continuous circumferential recess (54) with a connecting duct (56) extending from the recess (54) to that side of the piston head (52a) which faces away from the first zone (72) of the chamber and the sealing arrangement associated with this piston head has a sealing ring (58) between the recess (54) and the first zone (72) of the chamber, and the piston head (52b) facing the second zone (74) of the chamber has a continuous circumferential recess (64) with a connecting duct (66) extending from the recess (64) to that side of the piston head (52b) which faces the second zone (74) of the chamber and the sealing arrangement associated with this piston head has a sealing ring (68) between the recess (64) and that side of the piston head (52b) which faces away from the second zone (74) of the chamber.

Abstract (de)

Es ist eine Zylinder-Kolben-Anordnung vorgesehen, die bevorzugt als Akkumulator in hydraulischen Systemen eingesetzt werden kann. Die Anordnung weist in einem zylindrischen Gehäuse (50) mehrere Kolbenköpfe (52a, 52b) auf, die frei verschieblich und an der Zylinderwand abdichtend angeordnet sind und zwischen sich durch gegenseitigen Abstand eine Zwischenkammer einschließen, die jeweils mit einem inkompressiblen Sperrfluid gefüllt ist, welche zusätzlich zu den üblichen Dichtungspackungen am Umfang der Kolbenköpfe eine Flüssigkeitsdichtung bilden, welche das Auslecken von Druckgas in den Zylinderkammerabschnitt, der das Hydraulikfluid enthält, weitgehend ausschließt.

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IPC 8 full level
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CPC (source: EP)
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Citation (search report)

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