

Title (en)
PRESSURE REGULATOR.

Title (de)
DRUCKREGELVENTIL.

Title (fr)
REGULATEUR DE PRESSION.

Publication
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Application
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Priority
DE 3722315 A 19870707

Abstract (en)

[origin: WO8900308A1] A pressure regulator is subjected to the action of a proportional force, for example that of a proportional magnet (10), and comprises a valve casing (11) which has a primary connection (12), a secondary connection (13), and a deaeration connection (14) and two mutually coaxial valve components (15, 35) which are guided in such a manner that they can move in the valve casing (11) and can be subjected to the action of the regulating force (F). The first valve component (15) controls a valve seat (16) in the form of a cup (17) in the valve casing (11) which connects the primary side to the secondary side and closes it in a rest, deaeration position, but which opens it for the transition to the working position. The second valve component (35) rests, in the rest position, as in the working position, on a seat surface (20) of the first valve component (15) and in the region of said surface prevents any deaeration by means of a valve component in the direction of the deaeration connection, but in the position of deaeration and separation from the first valve component (15) opens up the passage between said component and the deaeration connection. The seat surface (20) of the first valve component (15) and the valve surface (22) which co-operates with the valve seat (16) in the valve casing (11) are situated in a common diametric plane, and the seat surface (20) is inside and surrounded by the valve seat (22). The pressure regulator is characterized in that the second valve component (35, 135) has, at the end facing the seat surface (20, 120) of the first valve component (15, 115), a valve seat formed by a cup (36, 136) which enables the second valve component (35, 135) to be placed in essentially linear contact on the seat surface (20, 120) of the first surface element and in that the external diameter of the cup (36, 136) of the second valve component corresponds to the internal diameter of the cup (17, 117) of the valve casing (11, 111).

Abstract (fr)

A pressure regulator is subjected to the action of a proportional force, for example that of a proportional magnet (10), and comprises a valve casing (11) which has a primary connection (12), a secondary connection (13), and a deaeration connection (14) and two mutually coaxial valve components (15, 35) which are guided in such a manner that they can move in the valve casing (11) and can be subjected to the action of the regulating force (F). The first valve component (15) controls a valve seat (16) in the form of a cup (17) in the valve casing (11) which connects the primary side to the secondary side and closes it in a rest, deaeration position, but which opens it for the transition to the working position. The second valve component (35) rests, in the rest position, as in the working position, on a seat surface (20) of the first valve component (15) and in the region of said surface prevents any deaeration by means of a valve component in the direction of the deaeration connection, but in the position of deaeration and separation from the first valve component (15) opens up the passage between said component and the deaeration connection. The seat surface (20) of the first valve component (15) and the valve surface (22) which co-operates with the valve seat (16) in the valve casing (11) are situated in a common diametric plane, and the seat surface (20) is inside and surrounded by the valve seat (22). The pressure regulator is characterized in that the second valve component (35, 135) has, at the end facing the seat surface (20, 120) of the first valve component (15, 115), a valve seat formed by a cup (36, 136) which enables the second valve component (35, 135) to be placed in essentially linear contact on the seat surface (20, 120) of the first surface element and in that the external diameter of the cup (36, 136) of the second valve component corresponds to the internal diameter of the cup (17, 117) of the valve casing (11, 111).

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