Title (en)
PNEUMATIC PRESSURE CONTROL VALVE

Title (de)
PNEUMATISCHES DRUCKREGELVENTIL

Title (fr)
SOUPAPE DE REGULATION DE PRESSION PNEUMATIQUE

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Application
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Abstract (en)
[origin: WO2007017033A1] The invention relates to a pneumatic pressure control valve (1) for controlling the pressure in the crankcase of an internal combustion engine. To this end, a regulating diaphragm (2) is provided inside the pressure control valve (1) whereby enlarging or reducing the size of the passage through a first larger outflow opening (15) and through at least one second smaller outflow opening (16) of the pressure control valve (1) that is separate and located at a distance from the first opening. The novel pressure control valve (1) is characterized in that: the regulating diaphragm (2) is acted upon by a single control spring (3); the spring force can be introduced by the single control spring (3) both into a diaphragm area (25), which interacts with the larger outflow opening (15), as well as into a diaphragm area (26) interacting with the at least one outflow opening (16); diaphragm area (25), which interacts with the larger outflow opening (15), can be displaced relative to the remaining regulating diaphragm (2) perpendicular to the diaphragm plane and which has an area equal to no greater than 1/5 of the total area of the regulating diaphragm (2); the regulating diaphragm (2) has an inner roll fold (21) around the diaphragm area (25) interacting with the larger outflow opening (15), and; the diaphragm area (26) of the regulating diaphragm (29) interacting with the at least one smaller outflow opening (16) is located outside of the inner roll fold (21).

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