

Title (en)
Dosing pump.

Title (de)
Dosierpumpe.

Title (fr)
Pompe doseuse.

Publication
EP 0211734 A1 19870225 (FR)

Application
EP 86401595 A 19860717

Priority
FR 8512008 A 19850806

Abstract (en)

1. Proportioning pump having a pump body (1) part of which is constituted by a control diaphragm (32) attached to the pump body in leak-tight manner and endowed with reciprocating motion under the action of a control element (17) with a view to periodically reducing and increasing a pumping volume (49) delimited between the pump body and the diaphragm and two valves (53-59) respectively for suction and discharge, one valve being connected to an inlet pipe (8) and the other valve being connected to an outlet pipe (9) for a liquid to be pumped, these valves being mounted within a support (42) which is rigidly fixed to the pump body and forms a separation between the pumping volume which communicates with the inlet pipe via the suction valve (53) and a collecting chamber (50) which communicates with the pumping volume via the discharge valve (59) and is connected to the liquid discharge pipe, characterized in that each valve is constituted in manner known per se by a flat disk of small thickness (54-60) mounted with interposition of a seal (55-61) within a chamber provided in the support, the housings of the two valves being open respectively towards the pumping volume in the case of the suction valve and towards the collecting chamber in the case of the discharge valve, the disks of the two valves being each applied against a first face of a thin washer (56-62) of resilient material fixed in position against the support and provided with holes (57-63) for communication respectively with the pumping volume and the collecting chamber, each washer being associated on its face opposite to the valve disk with a layer of small thickness (58-64) of elastic material having open porosity.

Abstract (fr)

L'invention concerne une pompe doseuse à membrane, avec deux clapets (53-59) d'aspiration et de refoulement respectivement montés sur un support (42) à l'intérieur du corps de pompe. Chaque clapet est constitué d'une plaquette plane et mince (54-60) montée avec interposition d'un joint d'un joint d'étanchéité (55-61) dans un logement prévu dans le support, les logements des deux clapets étant ouverts respectivement vers le volume de pompage pour le clapet d'aspiration et vers la capacité collectrice pour le clapet de refoulement, les plaquettes des deux clapets étant chacune en appui contre une première face d'une rondelle mince (56-62) en un matériau élastique, immobilisée contre le support et munie de trous (57-63) de communication respectivement avec le volume de pompage et la capacité collectrice, chaque rondelle étant associée sur sa face opposée à la plaquette du clapet à une couche de faible épaisseur (58-64) d'un matériau élastique à porosité ouverte.

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• [A] FR 1224446 A 19600623
• [A] DE 2855541 A1 19800626 - ZAHNRADFABRIK FRIEDRICHSHAFEN
• [A] DE 2803471 B1 19790503 - DULGER VIKTOR

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