

Title (en)

MEMBRANE MODULE FOR A PNEUMATIC CONTROL SYSTEM

Publication

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Application

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Priority

DE 3204100 A 19820206

Abstract (en)

[origin: US4522220A] A diaphragm module for pneumatic control systems comprises at least a pressure comparing stage and a force/pressure transducer controlled by said stage. The design of said module comprises chambers in a housing divided by diaphragms, wherein the force transmission between the diaphragms is achieved by intermediately arranged diaphragm disks. For a low friction mounting of the diaphragm disks in the housing without fixation with the intermediately arranged diaphragms the module comprises the following design: The diaphragm disks (36-39) comprise central pin projections (40) and recesses (44), wherein the pin projection of a diaphragm disk each is inserted into a recess of an adjacent diaphragm disk via a central hole (35) provided in the comparing or tightening diaphragm (31, 33, 34), respectively; the housing (11-16) and the diaphragm disk (36-39) comprise annular ribs (42) which are pressed into the diaphragms (30-34) for tightening when pressure is applied; and at least two diaphragm disks (36-39) comprise in their plane surfaces concentric annular grooves (43) which are engaged by annular collars (41) of related diaphragms (FIG. 1).

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IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

Hengstenberg "Messen und Regeln in der chemischen Technik", Springer Verlag 1964, S. 1159 und 1170

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