

ABSTRACT

CONTROLLER

5 Provided is a small-sized controller capable of
precisely controlling a flow rate of a high-pressure
fluid. Between a working shaft 43 of a drive device 3
and a valve stem 15, a power transmission device 4 is
disposed to amplify a force acting on the working shaft
10 43 and transmit the resultant force to the valve stem 15.
A diaphragm 14 as a valve element is made of metal and is
deformable to: a state where a fluid passage 12b is fully
closed; a state where the fluid passage 12b is fully open;
or a state where the fluid passage 12b is partially open.
15 When the fluid passage 12b is partially open, on the basis
of the flow rate of a fluid flowing through fluid passages
12a, 12b, the drive device 3 finely adjusts the position
of the working shaft 43 such that the flow rate is
constant.

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Fig. 1