

ABSTRACT

[Problem] To provide a valve device which can realize high flow rate control and high-speed response, and which is easy to manufacture.

[Solution] A valve device comprising a valve body 2, a valve element 41 and a multi-stage cylinder actuator 60 for moving the valve element, wherein the multi-stage cylinder actuator 60 includes a casing 6 divided into an upper cylinder chamber 64 and a lower cylinder chamber 66, an upper piston 81 slidably arranged in an upper cylinder chamber 64, and a lower piston 83 having an operation shaft 83d for operating the valve element 41 and an abutment shaft 83a for contacting the upper piston 81, the upper piston 81 has an upper operation air passage 81b for supplying operation air, the lower piston 83 has a lower operation air passage 83b in communication with the upper operation air passage 81b at a contact portion with the upper piston 81, and an O-ring 92 is provided at the contact portion to prevent leakage of the operation air.

[Selection diagram] FIG.1