

ABSTRACT

FLOW RATE REGULATING VALVE AND FLUID CONTROL APPARATUS USING THE SAME

To provide a flow rate regulating valve capable of detecting a state where a flow path is fully closed even when there is no lead wire or the like for detecting the state where the flow path is fully closed. A flow rate regulating valve (1) is a fluid regulating valve including a valve body (49) for opening and closing fluid flow paths (61, 62) provided in a body (60) and includes an actuator unit (3) for moving the valve body (49), and the actuator unit (3) includes a drive motor (10), a slider (30) moved by a rotation of the motor (10), a cylindrical body (40) mounted on the slider (30), and a shaft (47) interlocked with the cylindrical body (40) and provided with the valve body (49) fixed to a distal end thereof. The motor (10) is a stepping servomotor, and has a pressing control function for moving the valve body in the closing direction at a continuous rated torque until a torque value becomes equal to or higher than a set value by a closed loop caused by a signal of the encoder, and detection of a closed position is performed by the pressing control function.

FIG. 1