



A control valve may be a valve wont to control fluid flow by varying the dimensions of the flow passage as directed by a sign from a controller. This permits the direct control of flow and therefore the consequential control of process quantities like pressure, temperature, and liquid level. In automatic control terminology, an impact valve is termed a "final control element". The opening or closing of automatic control valves is typically done by electrical, hydraulic or pneumatic actuators. Normally with a modulating valve, which may be set to any position between fully open and fully closed, valve positioners are wont to make sure the valve attains the specified degree of opening. Air-actuated valves are commonly used due to their simplicity, as they only require a compressed gas supply, whereas electrically-operated valves require additional cabling and switch gear, and hydraulically-actuated valves required high supply and return lines for the hydraulic fluid.

An automatic control valve consists of three main parts during which each part exist in several types and designs:

Valve actuator - which moves the valve's modulating element, like ball or butterfly.

Valve positioner - Which ensures the valve has reached the specified degree of opening.

This overcomes the issues of friction and wear.

Valve body - during which the modulating element, a plug, globe, ball or butterfly, is contained.

Accessories - Check Valves, Air Locks, Solenoids to drive the actuator and other supporting functions.

