

Actuation

How does a valve actuator work?

A valve actuator operates the opening and closing of a valve utilising pneumatic or hydraulic pressure or electricity. This is an alternative to manually operated by a plant worker, allowing remote adjustment or rapid operation of larger valves.

How does a pneumatic actuator work?

Pneumatic actuators rely on a form of pressurised gas, often compressed air entering a chamber, where the air/gas builds up pressure. When the pressure reaches a certain level there is a controlled movement of a piston or gear either in a straight line or in a circular motion.

What is the difference between spring return and double acting actuators?

Spring-return (single) actuators supply power/pressure to only one side of a piston, the spring powers the alternate side moving the valve to open or close position. In contrast, the double acting actuator uses piston element to operate the valve therefore both chambers require pressurisation.