



# What are Valve Actuators? & what are Part-Turn Valve Actuators?

Valve actuators are a kind of control valve, and there are several choices accessible to satisfy plant-wide and individual automation needs. Whereas direct in concept, consisting of a box with an input, output, and a mechanism to function a valve, there are literally quite a few decisions in selecting the right [Programmable Valve Actuators](#).

## Types of Valve Operation:

There are numerous types of control valves. From the perspective of a valve actuator, there are two important types of valve operation.

- **Rotary (Quarter-Turn) Operation-** These kinds of valves are typically convenient to suit with the accurate actuator because the operation is comparatively normal, requiring a 90-degree rotation at the accurate force.



- **Multi-Turn Operation-** This group of valves have either rising non-rotating or non-rising rotating stems and needs multiple turns to move the valve closure element from the open to the closed position.

## **Part Turn Valve Actuators:**

A part turn actuator is a form of actuator, called as a rotary actuator as well which can rotate left or right solely over an angle of most 300°. These hydraulic actuators operate at working pressures around 70 bars. Part-turn actuators are very smaller than cylinders and don't have any external moving components. These actuators are very simple in design. There are two versions: one has two wings on the shaft, and also the different one has two internal dividers.

Most Part Turn Valve Actuators require a quarter turn of the valve stem to move from closed to open and vice-versa. This kind of valve, having a typical movement of ninety degrees, permits use of an actuator with a notable travel distance.