



Control Valves:

Types of Control Valves

1.1 Globe Valves

- Ideal for high-pressure applications and precise flow control.
- Available in sizes 1" to 24" with ASME Class 150 to 2500 connections.
- Constructed with high-strength materials such as LCC, WCB, WCC, WC9, C5, Monel, and CF8M SST, suitable for severe temperature and pressure conditions.
- Used in oil and gas production and distribution, power generation, and industrial processes.

1.2 Ball Valves with Actuator (On/Off)

- Designed for applications requiring open and close flow control with minimal pressure drop.
- The 90° rotation mechanism enables fast and efficient operation, ideal for gas lines, liquids, and chemical products.
- Available in reduced-port or full-port configurations, with soft or metal sealing options for greater durability in extreme conditions.
- Compatible with pneumatic, electric, and hydraulic actuators for automation.

1.3 Segmented Ball Valves

- Provide greater control and modulation capabilities than conventional ball valves, offering excellent control ratio and high precision in flow adjustment.
- Designed to handle fluids with suspended solids or processes with variable flow conditions.
- The robust design ensures excellent wear resistance, making them ideal for pulp lines, mining, oil, and gas applications.
- Available in a wide variety of materials and sealing configurations, including metal seats and high-resistance polymers.

1.4 Butterfly Control Valves

- Designed for high-volume flow control, available in wafer and lug styles.
- Available in sizes 2" to 24" and ASME Class 150 and 300 pressure ratings.
- CF8M stainless steel construction with PTFE seats, suitable for temperature ranges between -40°C to 150°C (-40°F to 302°F).
- Equipped with a one-piece shaft, blowout-proof stem, and anti-static device for safe and reliable operation.
- Can be manually operated (lever or gear) or automated with pneumatic, electric, or hydraulic actuators.

Types of Available Actuators

- **Pneumatic Actuators:** A reliable and fast-response option for general industrial processes, ideal for applications requiring quick and repetitive actuation.
- **Electric Actuators:** Designed for automation systems and remote control, providing precision and control in flow and pressure regulation, with SCADA system integration.
- **Hydraulic Actuators:** Specifically designed for high-pressure and high-torque operations, used in applications where high actuation force is required, such as pipelines and high-pressure gas lines.
- **Electrohydraulic Actuators:** Combine the precision of electric systems with the force of hydraulic systems, making them ideal for valve control in extreme conditions, such as compression stations, processing plants, and offshore applications.
- **Gas-Over-Oil Actuators:** Use process gas pressure as an energy source to operate the hydraulic system, making them ideal for remote areas without access to electricity or compressed air. These actuators are widely used in gas pipelines, regulation stations, and emergency systems, as they provide reliable and efficient operation in high-pressure gas environments.

Common Applications of Control Valves

- Flow and pressure regulation in gas and liquid systems.
- Pressure control in pipelines and oil and gas transport.
- Chemical injection systems in industrial processes.
- Level control in storage tanks.
- Water distribution and industrial water treatment.
- Applications in refineries, power generation, and petrochemical industries.