

STRITT & PRIEBE INC.

VALVE SELECTION CRITERIA

Use the list below as a guide to some of the many factors you'll need to consider in making an important valve or actuator purchase. Knowing these criteria will help us select the best valve for your particular application.

APPLICATION

- o Media being handled, e.g., liquid, gas, slurry, or solid
- o Corrosiveness of media, e.g., pH, concentration
- o Corrosiveness of atmosphere
- o Flow (velocity, capacity, Cv, direction)
- o Pipe size
- o Media temperature (maximum to minimum)
- o Pressure: maximum operating pressure; maximum differential pressure
- o Operation: e.g., manual/automatic, on-off throttling
- o Installation constraints
- o Envelope dimensions
- o Weight
- o Accessibility
- o Conformance to appropriate standards, e.g., API, AWWA, ANSI, FM, UL, OSHA, etc.
- o Tightness of shutoff required

VALVE ACTUATION

- o Type, e.g., manual, electric, pneumatic, hydraulic
- o Motion required
- o Rotary, e.g., quarter-turn, multi-turn
- o Linear
- o Mode of operation
- o Double acting
- o Spring return: spring-to-closed, spring-to-open
- o Required valve operating thruster torque
- o Power supply, e.g., voltage, available air supply
- o On/off, throttling, or proportional control
- o Corrosive resistance: materials, coating, tubing
- o Speed of operation
- o Frequency of operation
- o Special requirements, e.g., toggling, testing
- o Accessories, e.g., limit switches, positioner, solenoid valve, transducers, manual override

VALVE REQUIREMENTS

- o Type of valve, e.g., ball, butterfly, gate, check, control, globe, plug, relief, regulator, pinch, diaphragm, etc.
- o Valve size
- o End connections, e.g., screwed, ranged/lugged, wafer, butt-weld, mechanical joint, etc.
- o Materials of construction, e.g., carbon steel, resins, steel or other alloys, cast iron, etc.
- o Country of origin
- o Body
- o Trim
- o Seats
- o Bolting
- o Frequency of operation
- o Packing
- o Special requirements, e.g., testing, tagging, coating
- o Accessories, e.g., stem/shaft extensions, locking device, position indicator, jacketing

SERVICE REQUIREMENTS

- o Testing
- o Source inspection
- o Availability of replacement valves, actuators, or parts
- o Documentation, e.g., certified prints, dimension drawings
- o Installation and maintenance instructions
- o Delivery requirements, e.g., timing, packaging
- o Availability of engineering service, e.g., application, field, factory