

Valve selection checklist

A checklist for specifying isolation, check and control valves.

Function

Isolation (on/off), non-return (check) or regulation (control). Using an isolation valve for throttling usually shortens its life.

Size and pressure class

Select nominal size from the line size and allowable pressure drop; select pressure class from the maximum working pressure at the maximum temperature.

Fluid and materials

Specify body, trim and seal materials against the fluid, concentration and temperature. Include any solids or abrasive content.

Connections

Flanged, wafer, lug, threaded or welded; face-to-face standard; flange standard and facing.

Operation

Lever, gear, handwheel, pneumatic or electric actuation, fail-safe action, position feedback and manual override.

Leakage and testing

Required seat leakage class, fire-safe or low-emission requirements, and the test documents needed.